

GESNERIADS

The Journal for Gesneriad Growers

Vol. 61, No. 1

First Quarter 2011



Agalmyla clarkei

The Gesneriad Society, Inc.

A non-profit membership corporation chartered by the State of Missouri

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Gesneriad Hybridizers Association — *CrossWords*, 3 issues, \$8 (\$9 outside USA). Send to Martha Lacy, 260 Stoddards Wharf Rd., Gales Ferry, CT 06335 <wclacy@snet.net>.

Newsletter Editors — *NewsViews*, free to editors; \$6 subscription to others. Contact Leslie Milde, 373 Main St., P.O. Box 14, Fremont, NH 03044 <meribush@aol.com>

Gesneriphiles Internet Discussion Group — Visit the website for instructions about joining the list:
<<http://lists.ibiblio.org/mailman/listinfo/gesneriphiles>>

British Streptocarpus Society — <www.streptocarpusociety.org.uk> To join from the USA/Canada send \$12 check payable to Dale Martens, 1247 Island View Dr., Sherrard, Illinois 61281. To join from any other country, send £8 or 12€ to Peter Pinches, 72 Coopers Rd., Handsworth, Birmingham, England B20 2JX.

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OBJECTS OF THE SOCIETY — The objects of The Gesneriad Society are to afford a convenient and beneficial association of persons interested in gesneriads, to stimulate a widespread interest in, gather and publish reliable information about the identification, correct nomenclature, culture and propagation of gesneriads; and to encourage the origination and introduction of new cultivars.

GESNERIAD REGISTRATION — The Gesneriad Society, Inc. is the International Registration Authority for the names and cultivars of gesneriads excepting the genus *Saintpaulia*. Any person desiring to register a cultivar should contact Judy Becker, 432 Undermountain Road, Salisbury, CT 06068 <hybridregistrar@gesneriadsociety.org>.

www.gesneriadsociety.org

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COVER

Agalmyla clarkei –
a new species from
the Philippines
(story on page 40)
(photo by R. Schneider)

President's Message

Peter Shalit <president@gesneriadsociety.org>
Seattle, Washington, USA

I've just returned from a fabulous event – the World Gesneriad Research Conference held at the Marie Selby Botanical Gardens in Sarasota, Florida from October 13-15, 2010. This conference brought together gesneriad researchers, students, and hobbyists from all over the world for three days of presentations, sharing ideas, and networking. I was happy to see many old gesneriad friends and make lots of new ones. I was also very gratified to see gesneriads having a much more prominent role at Selby. The icing on the cake was helping to judge the gesneriad show which was held the weekend following the conference. My team repeatedly remarked on the high quality and diversity of the entries.

There was so much to learn at the conference. Many gesneriads are on the verge of extinction in their native habitat. We saw pictures of these habitats, both in the New World and the Old World. We heard about efforts to protect these habitats as well as the potential role of institutions and hobby growers in conservation of threatened species. Taxonomists are using new DNA tools to learn about the evolutionary relationships between gesneriad species and, as a result, some of the plants we grow may have their scientific names changed within the next few years. This may be traumatic for some of us but keep in mind that even if the name changes, the plant hasn't changed – and it doesn't care what we call it.

If The Gesneriad Society did not exist, I doubt that this valuable conference would have happened. Our Society has had a great influence on the world of gesneriad research. Many of the researchers and organizers were encouraged in their training by receiving grants from our Society, and many of the student researchers there had received some of their support from either our Elvin McDonald Research Endowment Fund, or the Nellie D. Sleeth Scholarship Endowment Fund. We should be very proud that our Society has had such an important role in the training of gesneriad researchers. The Society is able to do this because of the generous contributions of our members. Please consider making tax-deductible contributions to our funds so that we may continue supporting research and training of gesneriad scholars.



The gesneriad students and researchers who attended WGRC 2010



Students who received the Hans Wiehler Travel Awards to attend the conference:
 Abdul Kartonegoro, Kuan-Ting Hsin, Jeremy Keene, Cassandra Coleman,
 Marcela Mora, Laura Clavijo, Carmen Puglisi, Hao-Chun Hsu

What lessons did I take home from my experience at the conference? First, that 20-minute talks are a great way to not get bored at a meeting, and that printed posters are another good way to present research findings on gesneriads. The Society may adapt these concepts for a future convention. Second, that there are a number of botany graduate students working on gesneriads. Some of us Gesneriad Society folk have been discussing how we could encourage these students to come to our conventions to present their research projects, perhaps in poster form. They would need support, since most students don't have the money to attend a convention. I think scholarships for students of Gesneriaceae to attend our conventions would be a great idea. What do you think? How would we accomplish this? Give me your ideas.

Good growing,

Peter

The Green Membership option is now available! This option provides all the benefits of Gesneriad Society membership with the exception that an electronic (pdf) version of GESNERIADS replaces the print copy. Green Membership is available to all renewing and new members anywhere in the world for \$25 annually. To save a tree, see page 55.

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Seed Fund

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As the long hot summer ends, we are taking stock of the losses. The prolonged heat wave, coupled with minimal rainfall, has taken its toll on our gesneriads. Air conditioning kept us from withering, but it dehumidified the growing areas so quickly that it was a constant battle to keep the plants adequately watered. Many plants flowered poorly, if at all and seed production was diminished. I presume that others had the same experience, since seed donations have been quite low this season. Please help us replenish our stocks of species seed by donating whatever you can. Seed donations should be sent to Karyn Cichocki or Marilyn Allen (see page 53).

As we write this, the Seed Fund Chairpersons are preparing to go to Sarasota for the 2010 World Gesneriad Research Conference to be held at Marie Selby Botanical Gardens in October. Many gesneriad researchers, students, and enthusiasts will be attending this conference, which promises to be extremely interesting. The new molecular studies are causing us to rethink and reclassify relationships which were previously based primarily on morphology. A good example of this was reported in an article in the 3Q2010 issue of GESNERIADS. It tells how a plant that was previously distributed as a *Gloxinia* became the type specimen of the new Brazilian genus *Chautemsia*.

When a new species is found, it's given a provisional name for purposes of identification. This often relates to its appearance or to the place or person associated with the discovery, such as *Sinningia* sp. "Rio das Pedras". Once the complete scientific description and name are published in Latin in a botanical publication, the new "official" name, written entirely in italics, is the one we should use. Dr. Alain Chautems has published the following names for some familiar species of *Sinningia*, so here are the changes you'll see beginning with this issue. *Sinningia* sp. "Rio das Pedras" becomes *Sinningia muscicola*, *Sinningia* sp. "Santa Teresa" becomes *Sinningia helioana*, *Sinningia* sp. "Gertiana" becomes *Sinningia gerdtiana*, *Sinningia* sp. "Florianopolis" becomes *Sinningia bullata*, and *Sinningia* sp. "Globulosa" becomes *Sinningia globulosa*. You may want to order some more labels or consider writing in pencil for easier modification as more names change!

Once again, please remember to enclose a self-addressed, letter-size envelope with orders mailed to the Seed Fund. We are not able to accept seed orders over the Internet, and your charge card information should never be sent to us in an email. Payment by charge card is preferred so that we can bill only for the seeds we have in stock, rather than sending credit slips. The seed lists are made up many months in advance and we are often sold out of popular items, so please list alternates.

Recent donations from the following are gratefully acknowledged: Marilyn Allen, Clay Anderson, Betsy Branson, Karyn Cichocki, John L. Clark, Susan Grose, Charles Hart, Kenji Hirose, Frank Kahn, Nancy Kast, Alan LaVergne, Jon Lindstrom, Leong Tuck Lock, Alison Lovell, Dale Martens, Jo Anne Martinez, Peter Parker, Bill Price, Johnnie Rainey, Angelika Richter, Michael Riley, Carolyn Ripps, Thad Scaggs, Tim Tuttle, and Marie Selby Botanical Gardens.

Mail orders for species seed to:
Carolyn Ripps, 21 Sprain Road, Hartsdale, NY 10530

Seed Packets — \$2 each

- Please**
- To pay by credit card, send your credit card number, expiration date, and signature, and indicate if the card is Mastercard or Visa (\$6 minimum)
 - Make checks payable to the The Gesneriad Society in U.S. funds
 - Provide a self-addressed, stamped envelope (non-U.S. orders will have the postage added to their credit card bill)
 - List alternate choices
 - Include your membership number (first number on your mailing label)
- Note**
- There is a limit of one seed packet of a single variety per order
 - There is a limit of 25 seed packets per order
 - There is a household limit of 50 seed packets per calendar year

Seed Fund – Species

Achimenes (D)

- *admirabilis* (B,F,L)
- *ceitoana* (B)
- *erecta* (B)
- *erecta* 'Tiny Red' (F,L)
- *grandiflora* (B,F,LM)
- *grandiflora* 'Robert Dressler' (B)
- *longiflora* (B)
- *longiflora alba* (B)
- *mexicana* (B)

Aeschynanthus (B)

- *angustifolius*
- *batakiorum*
- *boschianus*
- *evrardii*
- *fecundus* SEL1974-2907-A
- *fulgens* USBRG82-271
- *garrettii* (B)
- *gracilis* 'Pagoda Roof'
- *guttatus*
- *horsfieldii*
- *hosseusii*
- *lobbianus* 'Radicans'
- *longicalyx*
- *longiflorus*
- *micranthus* SEL 1974-0260
- *musaensis*
- *parviflorus* SEL 1974-2701
- *parvifolius*
- sp. MSBG87-162
- sp. Cameron Highlands
- sp. Mt. Batupasak HW12587
- sp. (red) / Philippines
- sp. (like slender *longicalyx*)
- sp. "Thai Yellow"

Agalmyla

- *parasitica* HW12714/Mt. Salak (B)

Alsobia (B)

- *dianthiflora*
- *punctata*
- sp. 'Chiapas'

Amalophyllon (D,H,L)

- *clarkii* USBRG 96-336
- *divaricatum* (*Phinaea divaricata*)
- *rupestre* RM2006-1 /Belize

Anodiscus (see *Gloxinia*)

Besleria

- *comosa* JLC9931 (T)
- *laxiflora* GRF9675 (M)
- *melancholica* (MT)
- *solanoides* GRE10975 (G,T)
- cf. *divaricata* JLC5629

Boea

- *hemsleyana*
- *hygroskopica*

Briggsia (A,R)

- *aurantiaca*
- *muscolola*
- species #2

Chautemsia

- *calcicola*

Chirita

- *caliginosa* (LM)
- *eburnea* (blue) (F,R)
- *flavimaculata* USBRG94-085 (R)
- *gemella*
- *hamosa* (F,M)
- *involutrata* (F,L)
- *involutrata* (dark blue)
- *lavandulacea* (LM)
- *liboensis* (white veined) (H,L)
- *longgangensis*
- *lutea* (formerly *C. eburnea* yellow) (F,R)
- *micromusa* (F,L)
- *pumila* (F,L)
- *pumila* USBRG2000-18 (F,LM)
- *sericea* (L,R)
- *spadiciformis* (L,R)
- *tamtiana* USBRG98-080 (F,R,P)
- *viola*
- species (Thailand)
- species (blue) from Phuket

Chrysothemis (F,LM)*friedrichsthaliana*

- *pulchella* (Ecuador)
- *pulchella* (formerly *villosa*)

Codonanthe (B)*calcarata* 'Puyo'*crassifolia**crassifolia* 'Cranberry'*devosiana* 'Frances Batcheller' (B,F)*devosiana* (*paula*)*devosiana* (pink) MP0018*devosiana* SEL 1997-0120A

- *erubescens*
- *gibbosa* (was sp. 'Santa Teresa')
- *gracilis*
- *gracilis* 'Kautsky Red Leaf' MP0016
- *serrulata*
- *uleana*
- *venosa*

Columnnea (B)*brenneri* JLC9833*byrsina* (*Pentadenia*) (L)*calotricha* SEL 2010-0138*citriflora* (*Trichantha citrina*)*crassicaulis* (*Pentadenia*)*crassifolia*

- *dodsonii*
- *eburnea* (*Dalbergaria*)
- *fawcettii*
- *glicensteinii*
- *hirta*
- *inaequilatera* (*Dalbergaria*) JLC6072
- *lehmannii* GRE11180
- *linearis*
- *microphylla*
- *oerstedia*
- *orientandina* (*Pentadenia*) (LM)
- *ornata* (*Dalbergaria*) GRF2665
- *oxyphylla*
- *polyantha* (*Dalbergaria*)
- *proctori*
- *purpusii*
- *rubriacuta* GRE11195
- *sanguinea* (*Dalbergaria*)
- *sanguinea* (*Dalbergaria*) 'Orange King' GRF9492
- *sanguinea* (*Dalbergaria*) (yellow)
- *scandens* var. *fendleri*
- *spathulata* (*Pentadenia*) GRF9503 (LM)
- *spathulata* (*Pentadenia microsepala*) W1837
- *spathulata* (*Pentadenia zapotalana*)
- *strigosa* (*Pentadenia*) GRF95154
- *sulfurea*
- *tandapiana*
- sp. aff *picta* GRE11104

Coryptoclectus*cutucuensis* (L)*speciosus* JLC9969*speciosus* v. *orbicularis* JLC11721**Crantzia***tigrina***Creosperma***castroanum* GRE11056 (L,H)**Cyrtandra***cupulata* (G,H,MT)*subulibractea* JRC788 (T)

- sp. (white) /Java (T)

Dalbergia (see *Columnnea*)**Diastema** (D,F,P)*affine* JLC9964*latiflorum* GRF 9669A (F,H,L)*racemiferum* JLC9824*vexans***Didymocarpus**

- *cordatus* (G,T)
- *sulfureus*

Drymonia*affinis* GRF98109*coccinea* GRF9873*coccinea* JLC9980 (T)*coccinea* var. *fusco-maculatus*

- *conchocalyx* 'Silver Lance' (T)
- *coriacea* GRE11039
- *doratostyla* GRF9674 (B)
- *ecuadorensis* JLC 9769
- *hoppii* JLC9863
- *mortoniana* (L)
- *pendula* SEL 1998-0223
- *pulchra* GRF98113
- *rhodoloma* ABG90-0528
- *serrulata* (B)
- *serrulata* GRF9752
- *strigosa* (B)
- cf. *ecuadorensis* JLC6185
- sp. (*umecta* ined.) (B)

Episcia (H,L,B,F)

- *xantha*
- *cupreata*

Epithema

sp. / N. Perak (M)

sp. (blue) /N. Perak (M)

Gesneria (H,F)*acaulis* (M)*christii* (LM)*citrina*

- *cuneifolia* (L)
- *cuneifolia* 'Quebradillas' (L)
- *cuneifolia* 'Tom Talpey' (L)
- *humilis*
- *pedunculosa* USBRG97-102 (S,T)
- *rupincola*
- *ventricosa* (M)

Glossoloma (*Alloplectus*)*bolivianum* USBRG95-140 (M)*ichthyoderma* JLC9836 (T)*scandens* GRE11235

- cf. *panamense* GRE11118

Gloxinella (*Gloxinia*) (D)*lindeniana* (F,L)

- Gloxinia** (D)
perennis (LM)
perennis 'Insignis' (L)
xanthophylla (*Anodiscus*) (M)
- Gloxiniopsis** (*Gloxinia*) (D)
racemosa (L)
- Haberlea** (A,R)
rhodopensis
- Hemiboea** (D)
 - *strigosa*
 - *subcapitata* (L)
- Henckelia**
 - *albomarginata* (H)
 - *hispida* (H)
 - *malayana* (H,M)
 - sp. LTL0406 (LM,R)
- Heppiella** (D)
ulmifolia GRF98172
- Kohleria** (D)
allenii (T)
 aff. *amabilis* 'Panama Pink'
hirsuta
peruviana
- Monophyllaea**
hirticalyx (L,U)
horsfieldii (U)
- Moussonia**
 - *elegans*
- Nautilocalyx**
adenosiphon
 - *mellitifolius*
- Nematanthus**
albus (sp. "Santa Teresa") (B)
australis (B)
 - *brasiliensis*
 - *corticola*
 - *fissus* GRF9938
 - *fluminensis*
 - *fornix*
 - *fritschii*
 - *punctatus* MP0052
 - *sericeus* (B)
 - *strigillosus* 'Ibitipoca' (B)
 - *wettsteinii* (B)
- Opithandra**
 - *primuloides*
- Ornithoboea**
wildeana (LM)
- Paraboea**
 - *capitata*
 - sp. (green leaf)
 - sp. (silver leaf)
- Paliavana** (S,T)
prasinata
prasinata GRF732
 - *plumerioides* (Cabral)
 - *tenuiflora*
- Paradrymonia**
 - *ciliosa*
 - *decurrens* (L)
 - sp. JLC5731 (F,P)
- Pentadenia** (see *Columnnea*)
- Phinaea** (D,F,P)
abolineata
multiflora 'Tracery'
 - *pulchella* JLC10538 (F,H,L)
- Ramonda** (A,R)
 - *myconi*
 - *myconi* —
 white
 lavender
 pink
 - clone G
- Rhytidophyllum** (G,H,S,T)
auriculatum
tomentosum
villosulum
- Ridleyandra**
 - *morganii*
 - *quercifolia*
- Rufodorsia** (F,LM)
 - *minor*
- Saintpaulia** (F,R)
 3. *shumensis*
 - 5a. cl. *grandifolia* No. 299
 - 5b. cl. *difficilis* Mather No. 2
 - 5b. cl. *grotei* Protzen
 - 5b. cl. *grotei* Silvert (F,L,R)
 - 5c2. cl. *diplotricha* Punter No. 7
 - 5f. cl. *orbicularis*
 - 8. *rupicola* cl. Cha Simba
- Seemannia** (*Gloxinia*) (D)
gymnostoma (LM)
nematanthodes
sylvatica
- Sinningia** (D)
aggregata (M)
aggregata 'Pendulina'
aghensis (T)
aghensis AC2356
allagophylla (MT)
allagophylla GRF9922
allagophylla GRF9929
allagophylla GRF9968
allagophylla (yellow)
 - *amambayensis* (L)
 - *araneosa* (F,L)
 - *brasiliensis* (M)
 - *brasiliensis* 'Verde'
 - *brasiliensis* AC1314
 - *bulbosa* (T)
 - *bullata* (was sp. "Florianopolis")
 - *calcaria* MP891 (F,L)
 - *canescens* (D,LM)
 - *carangolensis* (M)
 - *cardinalis* (F,LM)
 - *cardinalis* (compact) (F,LM)
 - *cardinalis* (dark calyx) (LM)
 - *cardinalis* (orange)
 - *cardinalis* peloric mix
 - *cardinalis* (pink)
 - *cardinalis* 'Innocent'

- *cardinalis* 'Skydiver' (LM)
- *cochlearis*
- *conspicua* (F,L)
- *conspicua* GRF 9942
- *cooperi* (LM)
- *cooperi* AC1522 (M)
- *curtiflora* (T)
- *curtiflora* GRF9927
- *defoliata*
- *douglasii* GRF91188 (LM)
- *douglasii* GRF9936 (LM)
- *douglasii* 'Red'
- *elatior* AC1409 (M)
- *elatior* GRF9963
- *eumorpha* /Saltao (L)
- *eumorpha* (lavender) (F,L)
- *eumorpha* (pink)
- *eumorpha* (white)
- *gerdtiana* (was sp. "Gertiana")
- *gigantifolia*
- *glazioviana* (L)
- *globulosa* (was sp. "Globulosa")
- *guttata* (LM)
- *harleyi* MP 482
- *hatschbachii* (L)
- *hatschbachii* 'Iporanga' (D,LM)
- *helioana* (was sp. "Santa Teresa")
- *iarae* (F,L)
- *incarnata* (S,MT)
- *insularis* (LM)
- *leopoldii* (F,L)
- *leucotricha* (F,L)
- *leucotricha* (pink)
- *leucotricha* cv. 'Max Dekking' (M)
- *leucotricha* "English"
- *lineata* (LM)
- *lineata* GRF9920 (LM)
- *lineata* (highly spotted)
- *macrophylla*
- *macropoda* (M)
- *macrostachya* (LM)
- *magnifica* GRF91121 (pink) (LM)
- *magnifica* GRF91134 (red)
- *mauroana* (D,M)
- *micans* MP891 (LM)
- *muscicola* MP1094 (was sp. "Rio das Pedras" MP1094)
- *muscicola* (dark) [was sp. "Rio das Pedras" (dark)]
- *muscicola* (light) [was sp. "Rio das Pedras" (light)]
- *nivalis* AC1460 (L)
- *nordestina*
- *piresiana* (L)
- *polyantha* (formerly sp. "Waechter") (L,M)
- *pusilla* (F,P)
- *pusilla* (Itaoca) (F,P)
- *pusilla* 'White Sprite' (F,P)
- *reitzii* (M)
- *reitzii* 'New Zealand'
- *richii*
- *sceptrum* (T)
- *sceptrum* AC2406 (T)
- *sellovii* (MT)
- *sellovii* GRF9919
- *sellovii* 'Bolivia' USBRG96-003
- *sellovii* 'Purple Rain'
- *speciosa* 'Buzios'
- *speciosa* 'Carangola'
- *speciosa* 'Domingos Martins'
- *speciosa* 'Regina'
- *speciosa* 'Sao Conrado'
- *speciosa* AC1503
- *sulcata* (LM)
- *tubiflora* (S,MT)
- *tuberosa*
- *warmingii* (T)
- *warmingii* GRF9921
- sp. aff. *aggregata* (yellow) (M)
- sp. aff. *aggregata* / Ilhabella MP631
- sp. aff. *reitzii* 'Black Hill' (M)
- sp. aff. *reitzii* GRF9914 (magenta)
- sp. aff. *warmingii* 'Esmeril' (L)
- sp. "Bahia"
- sp. "Ibitioca" (LM)
- sp. "Pancas"
- mixed species
- **Smithiantha** (D,F,M)
 - *canarina* GRF9105
 - *lauri*
 - *multiflora*
 - *multiflora* GRF9121
 - *multiflora* GRF9122
 - *zebrina* GRF9104
- **Streptocarpus**
 - *buchananii* (B)
 - *candidus* (F,R)
 - *compressus*
 - *confusus* (U)
 - *confusus* ssp. *confusus* /Swaziland
 - *cooperi* (U)
 - *cyanandrus* (F,P)
 - *cyaneus* (blue) (R)
 - *cyaneus* (blue/long corolla)
 - *cyaneus* (lilac)
 - *daviesii* (F,U)
 - *denticulatus* (U)
 - *dunnii* (U)
 - *eylesii* (U)
 - *fanninae* (R)
 - *fasciatus* (R)
 - *fasciatus* /Krokodilpoort, E. Transvaal (R)
 - *floribundus* (R)
 - *formosus* (R)
 - *formosus* /E. Cape, Transkei
 - *galpinii*
 - *gardenii* (F,L)
 - *glandulosissimus*
 - *goetzei* (U)
 - *grandis* (U)

- grandis* (blue form)
grandis ssp. *grandis*
haygarthii (F,U)
- *haygarthii* JT04-03D/Transkei Coast (F,U)
 - haygarthii* JT04-051/Inchanga (U)
 - haygarthii* /Mkambati, Transkei (U)
 - holstii* (B,L)
 - johannis* (F,R)
 - johannis* /Komga, E. Cape
 - johannis* /Weza, S. Natal (R)
 - sp. aff. *johannis* (F,R)
 - kentaniensis*
 - *kentaniensis* (N. Kei River)
 - kirkii* (F,L)
 - *kunhardtii*
 - *lilliputana*
 - *meyeri* /SE Transvaal (R)
 - meyeri* /NE Cape Province
 - modestus* (R)
 - *modestus* /Magwa Falls, Transkei (R)
 - molweniensis*
 - muscosus* (L)
 - nobilis* (M)
 - pallidiflorus* (F,LM)
 - parviflorus* (R)
 - parviflorus* (mauve)
 - *parviflorus* (white) (R)
 - parviflorus* (white/mauve)
 - *parviflorus* ssp. *parviflorus* /Limpopo Province
 - pentherianus* (F,L)
 - polyanthus* subsp. *comptonii*
 - polyanthus* subsp. *dracomontanus*
 - polyanthus* subsp. *polyanthus*
 - polyanthus* subsp. *polyanthus* /lg fl
 - polyanthus* subsp. *polyanthus* /Valley of 1000 Hills, Natal
 - porphyrostachys* (U)
 - primulifolius* (F,R)
 - primulifolius* /Valley of 1000 Hills
 - prolixus* (F,U)
 - pumilus* (F,P)
 - *pusillus* JT04-02C (P)
 - rexii* (white)
 - rexii* (pale blue/long corolla)
 - rexii* (white/blue mix)
 - rimicola* (F,P)
 - roseoalbus* (F,R)
 - saundersii* (U)
 - saxorum* (B)
 - sp. nov. / Shiyalongubo Dam
 - thompsonii* (B,L)
 - trabeculatus* (U)
 - *vandeleurii* (U)
 - variabilis* (F,R)
 - wendlandii* (U)
 - wilmsii* (U)
 - wilmsii* /Long Tom Pass (U)
 - Mixed species
- Titanotrichum***
oldhamii (propagules)
- Tremacron***
 • *aurantiacum* (R)
- Trichantha*** (see *Columnnea*)
- Vanhouttea*** (S,T)
- *brueggeri*
 - lanata*
 - *pendula*
- Mixed alpine gesneriads**
Mixed gesneriad species
- Limited quantities available. Packet may contain small amount of seed

Seed Fund Key

- | | |
|--|--|
| (A) Alpine or cool greenhouse | (LM) Low to medium height |
| (B) Suitable for hanging basket | (M) Medium height; 1 to 2 feet |
| (D) Has dormant period, forming tubers or rhizomes | (MT) Medium to tall |
| (F) Blooms readily in fluorescent light | (P) Petite or miniature; under 6" |
| (G) Recommended for greenhouses; requires space | (R) Rosette in form |
| (H) Requires humidity and warmth | (S) Requires sun to bloom |
| (L) Low growing; not more than 12" | (T) Tall plants; generally over 3 feet |
| | (U) Unifoliate or single leaf |
| | (V) Leaves may be variegated |

Color Photo Sponsorship

Color photo on page 49 sponsored by the Gesneriad Hybridizers Association

The World Gesneriad Research Conference 2010

John R. Clark, Conference Chair
Jeanne Katzenstein, Conference Coordinator

The World Gesneriad Research Conference 2010 (WGRC 2010) was an international meeting of the world's Gesneriaceae researchers, students and lay enthusiasts who came together with the goal of understanding and promoting knowledge of the plant family Gesneriaceae. The conference was held October 13-15, 2010 at the Marie Selby Botanical Gardens in Sarasota, Florida USA. Over 70 people from around the world attended WGRC 2010,



Attendees at the WGRC 2010 held at the Marie Selby Botanical Gardens

with registrants from North and South America, Europe, and Asia. Attendees were rewarded with 34 oral presentations by researchers and students, with topics covered including phylogeny and taxonomy, biogeography, floristics, development and reproduction, and education and conservation. (See list of presentations and posters at the end of this article.)

The main goals of the conference —

- Bring together the world's researchers in Gesneriaceae along with a high density of students for unparalleled intellectual exchange.
- Maximize opportunities for students and new researchers to enter into discussions and potential collaborations with established researchers.
- Provide ample time for all interested researchers to present data and to discuss the future direction of gesneriad-related research and study.

The broader impacts of the conference —

- WGRC 2010 was the largest gathering of its kind in history. Student involvement and opportunities for new research collaborations will ensure continued advancements in Gesneriaceae research.
- Efforts to establish a Web-based coalition of Gesneriaceae researchers were made; this effort will provide long-term involvement of researchers from all over the world to continue working towards a comprehensive Gesneriaceae phylogeny and other research objectives.
- A working plan for achieving a comprehensive Gesneriaceae phylogeny was discussed. Once constructed, the Gesneriaceae phylogeny will be a critical tool in addressing evolutionary questions in the Gesneriaceae and may also facilitate conservation-based initiatives.

- WGRC 2010 exposed a large number of people to basic research and the plant family Gesneriaceae for both conference attendees and the general public through the gesneriad exhibition held at the end of the conference.

A principal objective of WGRC 2010 was to provide opportunities for new Gesneriaceae researchers and students. To this end, the conference planning committee raised funds to establish the Hans Wiehler Student Travel Award. This award was competition based, and students submitted proposals that were then reviewed by the committee. Sufficient funds were raised to award support to eight students from Asia, Europe, and the USA.

The diversity of the attendee group was a major strength of WGRC 2010. The lunches, breaks, mixer, and banquet allowed many opportunities for everyone to mingle and share thoughts about gesneriads. As part of the banquet, Professor Anton Weber, distinguished faculty emeritus at the University of Vienna, presented a lively and entertaining discussion on generic names in Gesneriaceae and their meaning – the thrilling and amazing science of etymology. Attendees also enjoyed the meals expertly prepared by Selby Gardens' on-site caterer, Local Coffee and Tea.

Perhaps most importantly, WGRC 2010 illustrated the level of interest in and concern for the conservation of gesneriads. Gesneriad enthusiasts and researchers are not only concerned with knowing and growing gesneriads, but also with conserving them. As habitat loss continues to ravage the environments gesneriads call home, we are prepared to do what we can to stem the loss of species. As we move forward into this next century, it is clear that gesneriads will remain a part of our lives and part of our world.

Special thanks to the Suncoast and Tampa Bay Chapters of The Gesneriad Society, staff and volunteers at Marie Selby Botanical Gardens, and the City of Sarasota for supporting gesneriad research and conservation.



WGRC 2010 attendees



John R. Clark
Conference Chair



One of the 34 presentations given at the conference



Attendees relaxing on the lawn at Selby Gardens during the mixer



Attendees enjoying social time at the banquet



Researchers working
in the Selby Herbarium



Angel Lara, Selby Greenhouse
Manager, giving a tour
of the conservatory



Some of the 105 entries in the flower show held after the conference



The accompanying plant sale after the conference

Some of the award-winning exhibits from the Flower Show:



Boea hemsleyana exhibited by Nancy Kast awarded Best in Show and Best Old World Gesneriad



Napeanthus costaricensis exhibited by Nancy Kast awarded Best New World Fibrous-Rooted Gesneriad



Ornithoboea wildeana exhibited by Kelly Ates awarded Best Lesser-Known Gesneriad

(photographs by Julie Mavity-Hudson, Nancy Kast, and Karyn Cichocki)



×*Sinvana* 'Mount Magazine'
exhibited by Jay Sespico
awarded Best Tuberos



Artistic Arrangement "Cuba"
exhibited by Mary Lou Harden
awarded Best Artistic



Chirita 'Patina' exhibited by Thad Scaggs
awarded Runner-Up to Best in Show

PHYLOGENY AND TAXONOMY PRESENTATIONS

- "Angiosperms – an overview" by DOUGLAS E. SOLTIS, University of Florida, Gainesville, Florida USA
- "Research in Gesneriaceae: Looking back and forward (my forty years observing gesneriads and gesneriologists)" by ANTON WEBER, University of Vienna, Austria
- "*Shuaria*, an arborescent new genus in the tribe Beslerieae" by JOHN L. CLARK, University of Alabama, Tuscaloosa, Alabama USA
- "The neotropical genus *Moussonia*" by ANGÉLICA RAMÍREZ-ROA, Universidad Nacional Autónoma de México, Coyoacán, México
- "Taxonomical novelties and morphological diversity in the genus *Sinningia*: Towards a reorganization of tribe Sinningieae" by ALAIN CHAUTEMS, Conservatoire et Jardin Botaniques de la Ville de Genève, Switzerland (co-author Mathieu Perret)
- "A molecular phylogeny of *Paradrymonia*: Insights for a new classification of a polyphyletic genus" by M. MARCELA MORA, University of Alabama, Tuscaloosa, Alabama USA (co-author John L. Clark)
- "Multigene phylogeny of the neotropical genus *Drymonia* (tribe Episcieae)" by LAURA CLAVIJO, University of Alabama, Tuscaloosa, Alabama USA (co-authors View-Hune Teoh, Ross Pritchard, John R. Clark, and John L. Clark)
- "A preliminary new classification system for the species of *Columnea*" by JAMES F. SMITH, Boise State University, Boise, Idaho USA (co-authors John L. Clark, and Marisol Amaya-Marquez)
- "Phylogenetic relationships and high levels of polyphyly among Old World didymocaroid Gesneriaceae genera" by MICHAEL MÖLLER, Royal Botanic Garden Edinburgh, Scotland, UK (co-author Anton Weber)
- "The Genus *Rhynchoglossum* in Malesia" by ABDULROKHMAN KARTONEGORO, Research Center for Biology, Indonesian Institutes of Sciences, Bogor, Indonesia
- "The taxonomy of *Cyrtandra*: How much do we know already and where do we go from here?" by GEMMA L.C. BRAMLEY, Royal Botanic Gardens, Kew, Richmond, England, UK (co-author Hannah Atkins)
- "On the origin and diversification of the monophyletic Pacific clade in the genus *Cyrtandra*: Recent insights from sampling along the southeast Asia-Pacific interface" by JOHN R. CLARK, Gesneriad Research Center, Sarasota, Florida USA, (co-authors Warren Wagner, and Eric H. Roalson)
- "Hawaiian *Cyrtandra*: A promiscuous lineage" by WARREN L. WAGNER, Smithsonian Institution, Washington, DC, USA (co-authors John R. Clark and Eric H. Roalson)
- "A new formal classification of Gesneriaceae: An attempt to square the circle" by ANTON WEBER, University of Vienna, Austria)

BIOGEOGRAPHY PRESENTATIONS

- "Diversification and systematics of the Gesneriaceae in Brazil: Insights from a supermatrix approach" by MATHIEU PERRET, Conservatoire et Jardin Botaniques de la Ville de Genève, Switzerland (co-author Christian Feuillet)
- "Taxonomic reconsideration and phytogeographic relationships of *Lysionotus pauciflorus* sensu lato in Japan and Taiwan" by GORO KOKUBUGATA, National Museum of Nature and Science, Japan (co-authors Yumiko Hirayama, Ching-I Peng, Masatsugu Yokota, and Michael Möller)
- "Gesneriaceae biogeography: The integral role of geography in the taxonomy and systematics of gesneriads" by JOHN R. CLARK, Gesneriad Research Center, Sarasota, Florida USA

FLORISTICS PRESENTATIONS

- "The Mexican Gesneriads" by ANGÉLICA RAMÍREZ-ROA, Universidad Nacional Autónoma de México, Coyoacán, México (co-author Laurence E. Skog)
- "The Gesneriaceae Flora of Cuba Project" by JOHN L. CLARK, University of Alabama, Tuscaloosa, Alabama USA (co-authors Laurence E. Skog and Jesus Matos)

- "The Gesneriaceae of the Guiana Shield and their distribution" by CHRISTIAN FEUILLET, Smithsonian Institution, Washington, DC, USA (co-author Laurence E. Skog)
- "Gesneriaceae of South China" by WEI YI-GANG, Guangxi Institute of Botany, Guilin, Guangxi Province, P.R. China (co-authors Wen Fang and Michael Möller)
- "The challenge to revise the Southeast Asian Gesneriaceae" by DAVID J. MIDDLETON, Royal Botanic Garden Edinburgh, Scotland, UK (co-author Ruth Kiew)
- "Flora Mesoamericana" by FRED BARRIE, The Field Museum, Chicago, Illinois USA (co-author Laurence E. Skog)

DEVELOPMENT AND REPRODUCTION PRESENTATIONS

- "Observations on splash dispersal among neotropical Gesneriaceae" by JONATHAN ERTELT, Vanderbilt University, Nashville, Tennessee USA
- "Developmental genetics of pseudovivipary in *Titanotrichum oldhamii*" by CHUN-NENG WANG, National Taiwan University, Taipei, Taiwan (co-author Jen-Yu Chang)
- "Notes and observations on root-shoot reproduction of clonal populations of herbaceous streamside Gesneriaceae" by JONATHAN ERTELT, Vanderbilt University, Nashville, Tennessee USA
- "*Sinningia speciosa* in the Genomics Era" by DAVID ZAITLIN, University of Kentucky, Lexington, Kentucky USA
- "Rediscovery of *Phinaea pulchella* in Cuba: Implications for the independent origin of radially symmetrical flowers in the Gloxinieae" by CASSANDRA L. COLEMAN, University of Alabama, Tuscaloosa, Alabama USA (co-authors Ross Pritchard, Eric H. Roalson, and John L. Clark)
- "Diversification of *Drymonia*: Multiple shifts between bee-adapted and hummingbird-adapted flowers" by JOHN L. CLARK, University of Alabama, Tuscaloosa, Alabama USA (co-authors Cassandra L. Coleman, Nathan Muchhala, Laura Clavijo, and John R. Clark)

EDUCATION AND CONSERVATION PRESENTATIONS


- "In vitro methods for the conservation of *Saintpaulia* spp." by VALERIE C. PENCE, Center for Conservation and Research of Endangered Wildlife, Cincinnati, Ohio USA
- "Registration numbers for *Saintpaulia* species – The new system from the African Violet Society of America" by JEFF SMITH, African Violet Society of America, Muncie, Indiana USA
- "Utilizing gesneriads as teaching tools in the classroom" by JONATHAN ERTELT, Vanderbilt University, Nashville, Tennessee USA
- "The Gesneriad Conservation Alliance" by JOHN R. CLARK, Gesneriad Research Center, Sarasota, Florida USA (co-author Jeanne Katzenstein)
- "iPlant Collaborative and My-Plant.org" by PAMELA S. SOLTIS, University of Florida, Gainesville, Florida USA

POSTERS

- "Systematic revision of the Brazilian endemic genera *Mandirola* and *Goyazia*" by ANDRÉA ONOFREDE ARAUJO, Universidad Federal ABC, São Paulo, Brazil (co-author Mathieu Perret)
- "Phylogenetic studies on *Paraboea*" by CARMEN PUGLISI, Royal Botanic Garden Edinburgh, Scotland, UK (co-author Michael Möller)
- "Genetic structure and conservation of a rare actinomorphic Gesneriaceae species in Taiwan, *Conandron ramondioides*" by KUAN-TING HSIN, National Taiwan University, Taipei, Taiwan (co-author Chun-Neng Wang)
- "A tale of Darwin's Gloxinia – The genetics of floral symmetry transition in *Sinningia speciosa*" by HAO-CHUN HSU, National Taiwan University, Taipei, Taiwan (co-author Chun-Neng Wang)

- "On the origin and diversification of the monophyletic Pacific clade in the genus *Cyrtandra*: Recent insights from sampling along the southeast Asia-Pacific inter-face" by CARLY F. SUMMERS, Marie Selby Botanical Gardens, Sarasota, Florida USA (co-authors Elaina Margenthaler and John R. Clark)
- "Comparative phylogenetic analysis of the origin and frequency of epiphytism among three disparate plant families: Bromeliaceae, Gesneriaceae, and Orchidaceae" by ELAINA MARGENTHALER, Marie Selby Botanical Gardens, Sarasota, Florida, USA (co-authors Carly F. Summers, David Benzing, Bruce K. Holst, John L. Clark, and John R. Clark)
- "The Gesneriaceae image library – A tool for field biologists" by ZACHARY WEIL LOVOY, University of Alabama, Tuscaloosa, Alabama, USA (co-author John L. Clark)
- "Gesneriaceae of South China" by WEI YI-GANG, Guangxi Institute of Botany, Guilin, Guangxi Province, P.R. China (co-authors Wen Fang and Michael Möller)
- "Towards a systematic revision of *Diastema* and *Monopyle* (Gloxiniaceae)" by JEREMY KEENE, Ohio University, Athens, Ohio USA (co-author Harvey E. Ballard)
- "Pattern formation during *Streptocarpus rexii* development" by ALBERTO SPADA, Università degli Studi di Milano, Milano, Italy (co-authors Michael Möller, Kanae Nishii, and Chun-Neng Wang)

Towards a Systematic Revision of *Diastema* and *Monopyle* (Gesnerioideae: Gesneriaceae)











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Introduction

Diastema and *Monopyle* are both genera of Gesneriaceae with a long history of taxonomic confusion. They are native to the southeastern United States and Mexico. *Diastema* is native to the southeastern United States and Mexico. *Monopyle* is native to the southeastern United States and Mexico. The two genera are closely related and have been treated as a single genus in the past. This project aims to clarify the relationships between these two genera and to provide a systematic revision of the group.

Generic Characteristics & Distribution

<i>Diastema</i>	<i>Monopyle</i>
	
	
	
	

Progress to Date

- Several new species have been discovered
- Phylogenetic relationships are being clarified
- Distributional data are being collected
- Molecular data are being analyzed
- A new classification scheme is being developed

Objectives

1. To investigate the relationships between *Diastema* and *Monopyle* and other taxa within Gesnerioideae.
2. To determine if *Diastema* and *Monopyle* are sister taxa or if they are members of a larger clade.
3. To determine if *Diastema* and *Monopyle* are sister taxa or if they are members of a larger clade.
4. To provide a systematic revision of *Diastema* and *Monopyle*.

Distinguishing Characters

- Inflorescence structure
- Leaf shape
- Stem characteristics
- Fruit characteristics

Distinguishing Characters

- Inflorescence structure
- Leaf shape
- Stem characteristics
- Fruit characteristics

Acknowledgements

This project was supported by the following individuals and organizations:

References

Ballard, H. E. (1998). *Diastema* and *Monopyle* (Gesneriaceae). *Journal of the Botanical Society of America*, 111(1), 1-10.

References

Ballard, H. E. (1998). *Diastema* and *Monopyle* (Gesneriaceae). *Journal of the Botanical Society of America*, 111(1), 1-10.

Presented at the Botanical Society of America Meeting, 2008

One of the many posters prepared and displayed at the conference

B&W photos from the conference courtesy of Bruce Holst, Julie Mavity-Hudson, Stephen Maciejewski, and Karyn Cichocki

Coming Events

February 19 – Arizona – Desert Sun African Violet & Gesneriad Society of Phoenix show and sale "Mardi Gras" at Valley Garden Center, 1809 North 15th Ave. (1 block north of McDowell Rd), Phoenix. Saturday: sale 9 a.m. to 4 p.m.; show 11 a.m. to 4 p.m. Contact Ann Stotzer <anncie@cox.net>.

March 19 & 20 – Illinois – Northern Illinois Gesneriad Society Show and Sale "Gesneriads and Antiques – Plants For All Ages" at the Chicago Botanic Garden, 1000 Lake Cook Road, Glencoe (847-835-5440). Saturday 12 to 4:30 p.m.; Sunday 10 a.m. to 4:30 p.m. Contact Susan Bradford <asusan.bradford@abbott.com> (847-740-7801).

March 19 & 20 – Washington – Puget Sound Gesneriad Society judged show and sale at Swanson's Nursery, Seattle. Saturday 12 to 6 p.m.; Sunday 9 a.m. to 4 p.m. Contact Rohm Gustafson

<lightgarden@clearwire.net> (206-255-3136).

March 26 – Ontario, Canada – Toronto Gesneriad Society annual show and sale "Gesneriads Love Classic TV", in the upstairs studios at the Toronto Botanical Garden, 777 Lawrence Avenue, East, Toronto. Saturday 9 a.m. to 5 p.m. Admission \$2; parking free. Contact Doris Brownlie (905-270-6770) <jtbbrownlie@idirect.com>.

April 9 & 10 – Ohio – Columbus African Violet Society 62nd annual show and sale "Violets Got Rhythm" at Franklin Park Conservatory, 1777 E. Broad St., Columbus. Saturday sale 10 a.m. to 5 p.m.; Saturday show noon to 5 p.m.; Sunday show and sale 10 a.m. to 4:00 p.m. Show and parking are free. Contact Donna Vogelpohl <donna8452@columbus.rr.com> (phone 614-878-2314).

JOIN TODAY!

The African Violet Society of America



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American Begonia Society

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Philadelphia LOVES Gesneriads

Charlene Marietti <cwmarretti@comcast.net>
Local Convention Chairperson

This summer, the City of Brotherly Love adds gesneriads to its long list of attractions when the annual Gesneriad Society Convention begins its run at the Loews Hotel in Philadelphia. Hosted by the Liberty Bell Chapter, the 55th annual Convention, to be held July 5 through 9, will be a showstopper.

You spoke. We listened. Convention plans include time to socialize, a blend of scientific and how-to presentations, a garden tour to Chanticleer, one of the great gardens of the region, and dinner with dinosaurs at the Academy of Natural Sciences.

The convention hotel is convenient and at the heart of Philadelphia. From the hotel on Market Street, it is a short walk to the historic district. (Take a virtual tour at <<http://www.ushistory.org/tour>>.) Just a few blocks from the hotel are the convention center, Reading Terminal Market, and Chinatown. A block away from the hotel is Macy's, where you can shop or enjoy a free daily concert played on the world's largest playing pipe organ. Walk one block further to City Hall, which occupies Center Square and, as the name implies, is the city center.

Philadelphia has something for everyone, including lots of free and budget-friendly activities. From historical attractions to premier art museums and cultural events to fine dining to gardens, the city and the surrounding region have more than enough to keep you busy. (Like parades, fireworks, and lots of hoopla? Be sure to come the weekend before the convention: No one does the Fourth of July like Philadelphia.)

Bring your friends. Bring your family. There are plenty of things to keep everybody thoroughly interested and occupied. The city is easy to walk and if your destination is a bit further than you like to walk, Philadelphia has a good public transportation system that includes trains, light rail, subways, and buses that can get you just about anywhere you want to go.

Whet your appetite for travel to Philadelphia this summer at <<http://www.philadelphiausa.travel/visitors>>.

Won't you join us in Philadelphia?



55th Annual Convention of the Gesneriad Society

Revised Convention Program

As a result of feedback in the yearly convention surveys, we have revised the convention program this year to make more efficient use of the hotel space and, more importantly, to give all convention attendees some slack time to digest all the information obtained in the lectures and other activities. One major change involves the move of the usual Thursday trip to Tuesday afternoon, at the beginning of convention rather than in the middle. This move enables us to add time for our new conservation training program as well as lighten up the Thursday schedule. Since there is no excursion outside the hotel, entries and other activities are now spread throughout the day rather than being compressed into the late afternoon and early evening. Throughout the convention we have also added several short "basics" and "beginners" sessions that will focus on sharing information useful to experienced growers and newbies alike. We hope you like the new program. If you should have any questions, don't hesitate to contact Paul Susi, Convention Chairperson.

Convention Trips

Two great locations have been selected by the Liberty Bell Chapter for the convention trips. Our Tuesday trip (note the change from the usual Thursday trip) is to beautiful Chanticleer Garden in Wayne, Pennsylvania, only a 30-minute ride from our hotel. Chanticleer has been called "the greatest of the great gardens in the Philadelphia region." It was the estate of Christine and Adolph Rosengarten, Sr., whose son left the property to be enjoyed as a public garden. Today, the original trees and lawns remain, but the focus is on plant combinations, containers, textures, and colors, often relying on foliage more than flowers. A woodland garden carpeted with Asian groundcovers and full of rarities leads to a water garden surrounded by exuberant perennials. Sculptural, homemade seats, benches, wrought iron fences, and bridges highlight the uniqueness and personal nature of the garden.

On Saturday night, we will dine in the shadows of the dinosaurs at the Academy of Natural Sciences, a short ten-minute ride from our hotel. Founded in 1812, the Academy is the oldest natural science research institution and museum in the Americas. Our night will begin with cocktails as we wander through the current exhibits and view a special exhibit of gesneriad materials from the Academy's collection. This will be followed by a buffet dinner, dessert, more exhibit viewing, and one or two special surprises along the way. It will be an event that you will not want to miss.

Loew's Philadelphia Hotel

1200 Market Street, Philadelphia, Pennsylvania 19107 USA

For direct hotel reservations, call 215-627-1200 or toll-free 888-575-6397 (US and Canada). Inform reservations you will be attending The Gesneriad Society Convention 2011. Reservations can be made by phone or online at: <<http://www.loewshotels.com/en/Philadelphia-Hotel/GroupPages/GSC>>. The link is also available at <www.gesneriadsociety.org>.

Rates: \$139 Single/Double \$159 Triple \$179 Quad

Concierge rooms are available at \$30 additional; rooms are subject to all applicable taxes (currently 15%). Reservations must be received by June 7, 2011 to guarantee convention rates, which are in effect three days before and three days after convention, based on availability. All guest rooms are non-smoking. Check-in time is 3 p.m.; check-out time is 12 noon. Wireless high-speed Internet access is available at \$9.95/day in guestrooms and free in lobby areas. Valet parking is available – rates and other parking options to be provided by The Gesneriad Society.

A cancellation fee of one night's deposit will be charged if the Loews is not informed of a reservation cancellation at least 7 days prior to the scheduled arrival. A \$50 early departure fee will be assessed for departures prior to the confirmed departure date.

55th Annual Convention of The Gesneriad Society

Tuesday, July 5, to Saturday, July 9, 2011

Convention Registration Form

Mail to Convention Registrar: **Mary Helen Maran**
 2655 Winding Wood Drive, Clearwater, FL 33761 USA

Or register online at <www.gesneriadsociety.org>
 Email inquiries to <maranmh@tampabay.rr.com>

Please print:

Name(s) _____
 [will appear on your name badge(s) and attendees list as printed here]

Address _____ City _____

State/Prov _____ Country _____ Zip/Post Code _____

Phone _____ E-mail _____

Membership # (top line of current mailing label) _____

- Life Member Attending my first Gesneriad Society Convention
 Commercial (nursery/greenhouse name) _____

Date arriving at hotel: _____ Date leaving hotel: _____

- I will be driving to convention or using a car there and will require parking
 I will require a phytosanitary certificate to transport plants out of the United States

Special diet needs (check box and/or specify below)

- Vegetarian specify if will also eat chicken fish
 Diabetic Allergic to shellfish Allergic to peanuts
 Other _____

Will you volunteer a few hours of your time to help with staffing during convention?
 (You will be contacted by the volunteer coordinator regarding specific days/times)

- Host at Registration Table Assist with Plant Sales
 Host at Flower Show Take meal tickets / Distribute table favors

Early registrations must be made online by midnight of or postmarked by April 15, 2011 to take advantage of the **10% discount on meals, activities, trips and purchases**. Registrations made **after April 15, 2011** will be at the **full rate for all selections**. The registration fee includes all lectures except the Judging School and Conservation Training, for which there are separate registrations. **Admission to plant sales will be in registration number order.**

Convention cancellation and refund policy: Full or partial cancellations of convention registrations made before June 20 will be honored with full refunds. Full or partial cancellations made between June 20 and July 5 will be honored with refunds based on previous commitments made to the hotel, bus and tour operators. Refunds for full or partial cancellations cannot be guaranteed if requested after July 5. **The registration fee is not refundable for full cancellations made after June 20.**

All prices are in US dollars

Registration	No.	Cost \$US
Primary Registrant (including packet)	_____ @ \$55 = \$	_____
Guest or Family: Spouse/children (including packet)	_____ @ \$25 = \$	_____
Guest or Family: Spouse/children (badge only)	_____ @ \$15 = \$	_____
Subtotal for registration fee:		\$ _____

*10% discount on meals, trips and purchases if postmarked by April 15, 2011
 or made online by midnight of April 15, 2011*

Event	No.	Cost \$US	Total
Tuesday , July 5, Board of Directors Breakfast Meeting	_____	@ \$15 = \$	_____
Tuesday , July 5, Trip to Chanticleer Gardens	_____	@ \$27 = \$	_____
Tuesday , July 5, Ciao Italia Opening Dinner Buffet	_____	@ \$50 = \$	_____
Wednesday , July 6, Judging School (<i>select one per registrant</i>)	_____	@ \$11 = \$	_____
Reg #1: <input type="checkbox"/> Novice <input type="checkbox"/> Intermediate/Advanced <input type="checkbox"/> Workshop (certified judges only)			
Reg #2: <input type="checkbox"/> Novice <input type="checkbox"/> Intermediate/Advanced <input type="checkbox"/> Workshop (certified judges only)			
Wednesday , July 6, Dinner Honoring Chapters	_____	@ \$42 = \$	_____
<input type="checkbox"/> <i>Roasted salmon filet, swiss chard and saffron jus</i>			
<input type="checkbox"/> <i>Seared chicken breast, mushroom Madeira demi-glacé, and parmesan polenta</i>			
Other registrant (specify): _____			
Thursday , July 7, Conservation Training	_____	@ \$11 = \$	_____
Registrants attending: _____			
Thursday , July 7, Dinner and Annual Membership Meeting			
<input type="checkbox"/> <i>Chicken breast with couscous, roasted vegetables, Asiago cheese</i>	_____	@ \$40 = \$	_____
<input type="checkbox"/> <i>Grilled swordfish, sweet potatoes and red onion fruit salsa</i>	_____	@ \$45 = \$	_____
Other registrant (specify): _____			
Friday , July 8, Executive Breakfast Buffet (<i>open to all</i>)	_____	@ \$30 = \$	_____
Friday , July 8, Flower Show Awards Banquet			
<input type="checkbox"/> <i>Seared filet of beef medallions, Yukon gold potatoes, brandy sauce</i>	_____	@ \$60 = \$	_____
<input type="checkbox"/> <i>Chicken roulade with artichoke and pine nuts, port wine sauce</i>	_____	@ \$55 = \$	_____
<input type="checkbox"/> <i>Fettuccine bolognese (vegan)</i>	_____	@ \$45 = \$	_____
Other registrant (specify): _____			
Saturday , July 9, Luncheon Honoring Commercial Growers	_____	@ \$30 = \$	_____
<input type="checkbox"/> <i>Philly cheesesteak sandwich, pasta salad, fresh fruit</i>			
<input type="checkbox"/> <i>Southern fried chicken cobb salad w/bacon, avocado, tomato, blue cheese, buttermilk dressing</i>			
<input type="checkbox"/> <i>Sundried tomato wrap w/grilled portobello mushrooms, goat cheese, and red onion (vegetarian)</i>			
Other registrant (specify): _____			
Saturday , July 9, The Academy of Natural Sciences			
(includes admission to exhibits followed by a buffet dinner	_____	@ \$85 = \$	_____
<input type="checkbox"/> Gesneriad Society tote bag (pick up at Convention)	_____	@ \$15 = \$	_____
<input type="checkbox"/> Convention DVD-ROM (to be mailed in late 2011)	_____	@ \$10 = \$	_____
Sub-total for meals, trips, activities, and purchases			\$ _____
Subtract 10% if postmarked by April 15, 2011			(\$ _____)
Total for meals, trips, activities, and purchases			\$ _____
<input type="checkbox"/> Flower Show Award Sponsorship			\$ _____
<input type="checkbox"/> in honor of <input type="checkbox"/> in memory of _____			
Subtotal from registration fee			\$ _____
Grand total			\$ _____

Make check or money order (payable in US\$ on a US bank) to: **The Gesneriad Society, Inc.**
or charge \$_____ to my VISA MasterCard # _____
Expiration Date _____ Name on card _____
Signature _____

2011 Convention Program

Tuesday, July 5

- 8:00 a.m. - 12:00 noon Board of Directors Meeting
11:00 a.m. - 1:00 p.m. Convention Registration and Information
1:00 p.m. - 1:15 p.m. Board Buses (depart at 1:15 p.m. promptly)
1:15 p.m. - 5:00 p.m. Trip to Chanticleer Gardens
5:00 p.m. - 6:00 p.m. Convention Registration and Information
(Flower Show entry forms accepted)
6:00 p.m. - 7:00 p.m. Host Chapter Social
7:00 p.m. - 8:15 p.m. Opening Dinner and Welcome by Convention Committee
and Gesneriad Society President

Wednesday, July 6

- 7:30 a.m. - 8:45 a.m. Convention Registration and Information
(Flower Show entry forms accepted)
8:45 a.m. - 11:15 a.m. Judges Training, Session 1: Novice / Intermediate and
Advanced / Workshop (pre-registration and Gesneriad
Society membership required)
12:15 p.m. - 2:00 p.m. Judges Training, Session 2, All Levels
2:15 p.m. - 3:00 p.m. Judges Interest Group Meeting
3:15 p.m. - 4:00 p.m. Newsletter Editors Meeting
4:00 p.m. - 5:00 p.m. Chapter Presidents Meeting with Society President and
C&A Chair (open to chapter/affiliate presidents or delegates)
4:30 p.m. - 6:00 p.m. Convention Registration and Information
(final Flower Show entry forms accepted)
4:30 p.m. - 5:00 p.m. Basics Information Exchange for Beginners
5:00 p.m. - 6:00 p.m. Judges Test
5:15 p.m. - 6:00 p.m. Informal Discussion Group
6:30 p.m. - 7:45 p.m. Dinner Honoring Chapters and Members-at-large
8:15 p.m. - 10:00 p.m. Gesneriad Hybridizers Association Meeting (open to all)
Program: "Gesneriad Hybrids from the University of
Arkansas" by Jon Lindstrom (University of Arkansas)

Thursday, July 7

- 8:00 a.m. - 8:45 a.m. Convention Registration and Information
9:00 a.m. - 12:00 p.m. Flower Show Entries
1:00 p.m. - 1:45 p.m. Conservation Update Meeting (open to all)
(Pre-registration and Gesneriad Society membership required)
1:30 p.m. - 2:00 p.m. Basics Information Exchange for Beginners
1:30 p.m. - 3:30 p.m. Auction Donations Accepted
2:00 p.m. - 3:45 p.m. Conservation Training (pre-registration required)
2:15 p.m. - 3:00 p.m. Informal Discussion Group
4:00 p.m. - 5:00 p.m. Lecture #1: "The Phylogenetics of the Genus *Petrocosmea*"
by Michael Kotarski (Niagara, NY)
4:30 p.m. - 5:30 p.m. Convention Registration and Information
5:30 p.m. - 7:15 p.m. Dinner and Annual Membership Meeting; President Peter
Shalit presiding; Awards of Appreciation; Election of Directors

Thursday, July 7 (continued)

- 7:45 p.m. - 8:45 p.m. Lecture #2: "Ask the Experts: A Grower's Forum"
moderated by Paul Kroll (East Aurora, NY)
- 8:45 p.m. - 9:00 p.m. Sales of Publications and Promotional Items
- 9:00 p.m. - 9:30 p.m. Early Entry Plant Sales (entry by registration number)
- 9:30 p.m. - 11:00 p.m. Plant Sales

Friday, July 8

- 6:30 a.m. - 7:15 a.m. Flower Show Late Entries (with permission of Show Chair)
- 7:15 a.m. - 8:00 a.m. Breakfast (open to all) with Instructions for Judges and Clerks
- 8:00 a.m. - 11:30 a.m. Flower Show Judging
- 8:30 a.m. - 9:30 a.m. Convention Registration and Information
- 9:00 a.m. - 5:00 p.m. Plant, Seed, Promo and Publications Sales; Auction Viewing
- 1:00 p.m. - 2:00 p.m. Lecture #3: "*Gloxinia* and *Seemannia* (and Who Knows
What Else)" by John Boggan (Washington, DC)
- 2:00 p.m. - 5:00 p.m. Flower Show Open
- 2:30 p.m. - 3:30 p.m. Conservation Test
- 3:30 p.m. - 5:00 p.m. Board of Directors Meeting
- 5:00 p.m. - 6:00 p.m. Convention Registration and Information
- 6:30 p.m. - 7:30 p.m. Cocktail Hour
- 7:30 p.m. - 9:15 p.m. Flower Show Awards Banquet (Awards Chair: Jo Anne Martinez)
- 9:15 p.m. - 10:30 p.m. Flower Show Open

Saturday, July 9

- 6:30 a.m. - 7:30 a.m. Photographers Only in Show Room
- 7:30 a.m. - 9:00 a.m. Flower Show Judges Critique (for judges and clerks who
participated in the 2011 Flower Show)
- 8:30 a.m. - 9:30 a.m. Convention Registration and Information
- 9:00 a.m. - 11:30 a.m. Auction Viewing
- 9:00 a.m. - 12:00 p.m. Plant Sales; Seed, Promo and Publications Sales Open
- 9:00 a.m. - 3:00 p.m. Flower Show Open
- 9:15 a.m. - 9:45 a.m. Basics Information Exchange for Beginners
- 9:45 a.m. - 10:45 a.m. Lecture #4: "Genetic Diversity in *Sinningia speciosa*:
History and Origins of the Florist Gloxinia" by David Zaitlin
(Lexington, KY)
- 11:30 a.m. Silent Auction Closes
- 12:00 p.m. - 1:45 p.m. Luncheon Honoring Commercial Growers;
Live Auction (Chair: Suzie Larouche)
- 2:00 p.m. - 3:00 p.m. Final Plant Sales
- 2:00 p.m. - 3:00 p.m. Auction Settlement (live and silent)
- 2:00 p.m. - 4:00 p.m. Phytosanitary Inspectors Available
- 3:00 p.m. - 4:00 p.m. Flower Show and Plant Sales Breakdown
- 5:30 p.m. - 5:45 p.m. Board Buses (depart promptly at 5:45 p.m.)
- 5:45 p.m. - 9:30 p.m. Trip to the Academy of Natural Sciences followed by a
buffet dinner in Dinosaur Hall

Judges Training School

The school will consist of morning and afternoon sessions to be held on Wednesday July 6, 2011. Individuals who are primarily interested in exhibiting and not necessarily becoming judges are also welcome to participate in the school. The morning session is comprised of three parts: 1) a Novice class for those interested in learning about the judging of gesneriads; 2) an Intermediate/Advanced class for accredited judges primarily interested in preparing for Senior judge exams; 3) a Workshop, open to all certified judges (topic to be announced in the January and May issues of *Appraisal*). The afternoon session will combine all three groups from the morning session for practice judging and discussion. Novice and Intermediate/Advanced exams will be given from 5 to 6 p.m. for those wanting to become accredited Gesneriad Society judges.

Registration for the School (both sessions) is \$11 and is payable when you register for Convention (both online and printed). **Please note: No payments for judging school will be accepted at Convention.** Subscription payments for *Appraisal* are to be made directly to Mel Grice. Novices who meet all the requirements to become student judges must subscribe to *Appraisal* no later than September 30, 2011.

The Judges Interest Group will meet from 2:15 to 3 p.m. on Wednesday. All current Gesneriad Society judges and those interested in becoming judges are welcome to attend. A flower show critique open to all those who participated in judging or clerking the show will be held on Saturday from 7:30 to 9 a.m.

Arleen Dewell, Shows & Judging Chair <arleendewell@shaw.ca>

Gesneriad Conservation Alliance – Training and Certification

The Gesneriad Conservation Alliance, a partnership between The Gesneriad Society, Inc. and the Gesneriad Research Center at Selby Gardens, is tasked with developing and implementing ex situ conservation strategies to preserve endangered, poorly known, or otherwise rare gesneriads. The Gesneriad Research Center is responsible for devising scientifically based strategies for managing these collections and to inform conservation growers of the tasks and responsibilities of maintaining species for conservation. The Gesneriad Society and certified conservation growers in the Society are responsible for growing and maintaining the specimens of concern.

Interested Society members are encouraged to register for and attend the Gesneriad Conservation Alliance – Conservation growers training and certification session on Thursday, 7 July from 2 to 3:45 p.m. A one-hour exam will be held on Friday, 8 July from 2:30 to 3:30 p.m. for final certification. No scientific background is required, but a desire to maintain accurate propagation records and to follow strict guidelines for propagating and distributing conservation plants is a must.

The training and certification session, modeled after the Society's judging school, will include a lecture covering basic topics in plant propagation and breeding, basic population genetics, and an introduction to ex situ conservation and plant records keeping. Lecture outlines and associated reading material will be provided and registrants will be expected to read these materials prior to the final exam. A brief question and answer session will follow the lecture.

The exam on Friday will include multiple choice, fill-in-the-blank, and short essay questions covering topics discussed in the lecture and reading material. A score of 85 or above is required for certification. Exams will be graded shortly after convention and test takers will be notified of their scores. Upon certification, conservation growers will be provided with additional materials to begin propagating species of concern. Conservation growers will become part of the core dialog to expand and improve this exciting new Society initiative. Annual re-certification will be required for all conservation growers.

Questions, comments, or concerns should be sent to John R. Clark, Chair, Conservation Growers Alliance, c/o the Gesneriad Research Center, Marie Selby Botanical Gardens, 811 S. Palm Ave., Sarasota, FL 34236 <johnrobertclark@gmail.com>. Please begin all correspondence with Attn: GCA.

A Call for Judges and Clerks

Members who are registered for the convention and would like to assist in the judging or clerking of the show on Friday should contact Doris Brownlie, 80-600 Silvercreek Boulevard, Mississauga, Ontario, L5A 2B4 Canada or <jtbrownlie@idirect.com> for consideration. Please include your email and landmail addresses, your judging status and your areas of expertise, if any. Remember to register for the breakfast on Friday as final instructions will be given there.

Flower Show Awards

The chapter members of the Liberty Bell Gesneriad Society are proud and excited to be hosting the 2011 Convention in Philadelphia. I need everyone's support to award the many winning exhibits that we are sure to see in the Convention Flower Show. With your help, I can recognize each and every award-winning exhibit. *THANK YOU* to all who have donated in the past. I am counting on you again this year. Never donated an award? Become a first-time donor and join the tradition. Remember, donations for awards are tax-deductible.

A member or chapter who wishes to donate may forward an award to me at 809 Taray de Avila, Tampa, FL 33613. Checks or money orders should be made payable to The Gesneriad Society. Awards may also be made when registering for convention by mail or on the website <www.gesneriadsociety.org>. All awards must be received by June 18. Any awards received after this date will be applied to next year's convention.

Preference is for unspecified awards. Special requests will be filled on a first-come basis. If there are no eligible entries, or the category's award has already been filled, with your permission the award will be transferred to another class or section. Should there be fewer eligible entries than awards, the balance of award donations will be carried over for awards at next year's convention. Acknowledgment of all award donations will appear in the fourth quarter issue of GESNERIADS and also on our website. Again, thank you for your past support and for your consideration for this year's convention.

Jo Anne Martinez <awards@gesneriadsociety.org>

Plant Sales Procedures

The plants available for sale at convention come from commercial vendors, Society members, and from chapters who may participate as donors or vendors. Chapters participating as vendors can raise funds for their own coffers. An invitation to participate as either a donor or vendor is extended to all Gesneriad Society members who adhere to the guidelines. Any amount of donated plant material is greatly appreciated. Donated plants do not need to be priced in advance, although it would be helpful. All potted plants for sale should be well rooted, clearly labeled and insect/disease free. Rhizomes, tubers, cuttings, and stolons in labeled plastic bags are also welcome.

Each item coming into plant sales must be labeled per the instructions detailed on the Society's website <www.gesneriadsociety.org>. To be considered a vendor (commercial, chapter or individual) at convention, you must bring a minimum of 50 plants in order to receive a portion of the sales revenue. All individuals, chapters, and vendors putting plants into the sale are expected to volunteer in the sales room for a few hours during convention. (Plants are dual tagged to ensure that sellers receive proceeds from their plants, buyers go home with correctly named plants, and the sales process is efficient.)

If you plan to donate and/or sell plants at convention, please inform us as soon as possible. Send your name, address, and the ID and tag color (example: "M.G." on blue tag) you will use on your tags to <gary@huntersgreenhouse.com> and <schaeffermmary@yahoo.com> or mail to Gary Hunter, 1610 Fern Glen Drive, P O Box 40, Drumore, PA 17518. Proceeds from plant sales are mailed to vendors after the convention.

All plants should be delivered to the convention by Wednesday or the very latest Thursday morning. If you plan on arriving later, please notify Gary Hunter or Mary Schaeffer to make alternate arrangements.

Convention Auction

Live or silent, we know that you will enjoy bidding and winning at this year's auction. If you plan on making an auction donation, complete the auction form that you will receive with your registration packet and have it with you when you bring your items to the auction area on Thursday afternoon. Bring us some of your own special plants or horticulturally related items as auction donations and join the fun.

Paul Susi, Development Chair, and *Suzie Larouche*, Auction Chair

The Gesneriad Society Convention 2011 Flower Show Schedule

"Philadelphia Loves Gesneriads"

Entries will be accepted on Thursday, July 7 from 9 a.m. to 12 p.m. Late entries may be received on Friday morning, from 6:30 a.m. to 7:15 a.m. only by prior arrangement and with the written permission of the Flower Show Chairperson.

Division I – HORTICULTURE

SECTION A — New World Gesneriads in Flower – Tuberous

- Class 1 *Sinningia speciosa* species or hybrids (upright or pendent flowers)
- Class 2 Other *Sinningia* species with rosette growth pattern
- Class 3 Other *Sinningia* species with upright growth pattern
- Class 4 Other *Sinningia* hybrids with rosette growth pattern
- Class 5 Other *Sinningia* hybrids with upright growth pattern
- Class 6 Other *Sinningia* species or hybrids (largest leaf less than 1" long)
- Class 7 Other tuberous gesneriads

SECTION B — New World Gesneriads in Flower – Rhizomatous

- Class 8 *Achimenes*, *Achimena*
- Class 9 *Kohleria*
- Class 10 *Seemannia* and its intergeneric hybrids
- Class 11 *Smithiantha*
- Class 12 Other rhizomatous gesneriads less than 5" in all dimensions including the container
- Class 13 Other rhizomatous gesneriads

SECTION C — New World Gesneriads in Flower – Fibrous-Rooted

- Class 14 *Codonanthe*, *Codonatanthus*
- Class 15 *Columnea* (*Dalbergaria*, *Pentadenia*, *Trichantha*)
- Class 16 *Episcia*, *Alsobia*
- Class 17 *Gesneria*
- Class 18 *Nematanthus*
- Class 19 Other fibrous-rooted gesneriads

SECTION D — Old World Gesneriads in Flower

- Class 20 *Aeschynanthus*
- Class 21 *Chirita* species
- Class 22 *Chirita* hybrids
- Class 23 *Petrocosmea*
- Class 24 *Saintpaulia* species
- Class 25 *Saintpaulia* hybrids or cultivars classified as miniatures (max of 6" diameter)
- Class 26 *Saintpaulia* hybrids or cultivars classified as semi-miniatures (max of 8" diameter)
- Class 27 *Saintpaulia* hybrids or cultivars classified as standards
- Class 28 *Saintpaulia* trailers
- Class 29 *Streptocarpus*, subgenus *Streptocarpella*
- Class 30 *Streptocarpus*, subgenus *Streptocarpus*, species
- Class 31 *Streptocarpus*, subgenus *Streptocarpus*, hybrids
- Class 32 Other Old World gesneriads

SECTION E — Gesneriads Grown for Ornamental Qualities Other Than Flowers: Decorative fruit and calyces are permitted, but no flowers or buds showing color. A plant should have some special quality of color, texture or growth habit to be entered in this section.

- Class 33 *Chirita*
- Class 34 *Episcia*
- Class 35 *Episcia* with pink-and-white leaf variegation
- Class 36 *Petrocosmea*
- Class 37 Other gesneriads with green-and-white leaf variegation
- Class 38 Other gesneriad species
- Class 39 Other gesneriad hybrids

SECTION F — New Gesneriads: Introductions made within the last 5 years, but not previously entered in this section of any Gesneriad Society Convention Show. A white card (not to exceed 8.5"×5.5") must be provided giving educational information such as name of hybridizer, collector, place of origin, special cultural requirements.

- Class 40 Species in flower
- Class 41 Species not in flower
- Class 42 Hybrids or named cultivars in flower
- Class 43 Hybrids or named cultivars not in flower

SECTION G — Lesser-Known Gesneriads Seldom Grown or Seen in Shows: A white card (not to exceed 8.5"×5.5") must be provided with educational information such as habitat, source, cultural requirements.

Class 44 In flower

Class 45 Not in flower

SECTION H — Trained or Sculptured Gesneriads: An educational 8.5"×5.5" white card is suggested stating what training the exhibit received and how the exhibit is to be viewed (all sides or from the front).

Class 46 Bonsai, topiary, espaliered, or other style

SECTION I — Collections of Gesneriads – A grouping of 3 to 5 different plants in flower or grown for ornamental qualities, or in combination (Saintpaulias must be in flower). Exhibitor must provide a white card, not to exceed 8.5"×5.5", with identification of plants. In Class 47, exhibitor is encouraged to reflect variety as this is a consideration in judging. In Class 48, educational information must also be provided.

Class 47 Plants of a single genus either species, cultivars or hybrids

Class 48 Kinship group – Interspecific or intergeneric hybrid/hybrids exhibited with one or more parents

SECTION J — Gesneriads Grown by a Novice – A Novice is anyone who has never won a blue ribbon in the Horticulture Division of a gesneriad (including AV) flower show. Exhibitors wishing Novice Status for the Horticulture Division may not enter other Horticulture classes.

Class 49 Gesneriads in flower

Class 50 Gesneriads grown for ornamental qualities other than flowers (no flowers or buds showing color allowed)

Division II – ARTISTIC

There is a limit of 4 entries in each class in Sections K, L and M with the exception of Challenge Class 54, which has a limit of 8 entries, and Class 55, which has no limit. Reservation requests (deadline June 20, 2011) must be emailed to <kdc05@ptd.net> or sent to Karyn Cichocki, 79 Beaver Run Road, Lafayette, NJ 07848. Reservations are also required for Sections N and O, with no limit on the number of entries in each class. *Artistic arrangers must leave the showroom at the latest by 2:00 p.m.*

SECTION K — Arrangements of Fresh-Cut and/or Growing Gesneriad Material

Class 51 "Mummers" – One of Philadelphia's traditions is New Year's Day Mummers Parade. Mummers wear elaborate, flamboyant costumes and strut to string band music. Your arrangement should have a festive flair. Niche size: 20"H × 15"W × 15"D.

Class 52 "Philadelphia Museum of Art" – Established in 1876, it is the third largest art museum in the US and it houses Renaissance, American, impressionist and modern art. Your arrangement should reflect one of these styles and be named on a 3×5 white card. Niche size: 15"H × 10"W × 10"D.

Class 53 "Punxsutawney Phil" – Groundhog Day is a Pennsylvania-German tradition and Punxsutawney Phil is the world's most famous groundhog. Fuzzy or hairy gesneriads should be featured in your design. Niche size: 10"H × 8"W × 8"D.

SECTION L — Arrangements of Fresh-Cut Gesneriad Material

Class 54 CHALLENGE CLASS – All materials will be provided, except mechanics and container. The class title will be announced at 9 a.m. and materials will be available at that time. Niche size: 7"H × 5"W × 5"D.

Class 55 "Waterworks" – Once the home of the engine room for Philadelphia's water department, this classical Greek structure sits above the Schuylkill River offering a view of rowers at their daily rituals. Create an underwater design, not to exceed 12" in any dimension.

Class 56 "Chinatown" – The Chinatown Friendship Gate welcomes visitors to this neighborhood located within Center City. Create a design with an Asian flavor using at least one Asian gesneriad. Niche size: 10"H × 8"W × 8"D.

Class 57 "Love Park" – This park is across from City Hall and features the LOVE sculpture designed by Robert Indiana. The park fountain water is often dyed to commemorate or celebrate events. Choose a color (blue, green, pink, or red) to highlight your arrangement. Niche size: 20"H × 15"W × 15"D.

SECTION M — Arrangements of Growing Gesneriad Material

Class 58 "Boathouse Row" – This row of 15 boathouses located on the East bank of the Schuylkill River is a historic site housing social and rowing clubs and their racing shells. Create a horizontal design, not to exceed 18" in width. No niche.

- Class 59 "Ben Franklin" – Besides being one of our founding fathers, Franklin was a leading author and printer, satirist, political theorist, politician, postmaster, scientist, inventor, civic activist, statesman, and diplomat. List your interpretation on a 3"×5" white card. Niche size: 15"H × 10"W × 10"D.
- Class 60 "Reading Terminal Market" – Philly cheese steaks, pretzels, scrapple, Amish offerings, or any other food or goods sold at the market: It is your choice for this design. Niche size: 15"H × 10"W × 10"D.
- Class 61 "Academy of Natural Sciences" – founded in 1812 it is the oldest natural science research institute and museum in the New World. Choose one of its featured exhibits (to be listed on a white 3"×5" card) for your design. Niche size: 10"H × 8"W × 8"D.
- SECTION N — Plantings of Growing Material**
- Class 62 Terrarium, straight-sided – not to exceed 24" in any dimension.
- Class 63 Terrarium, curved – not to exceed 24" in any dimension.
- Class 64 Tray Landscape – not to exceed 24" in any dimension.
- Class 65 Natural Garden – planted on any naturally occurring material, (e.g. rock, wood) not to exceed 24" in any dimension.
- SECTION O — Artistic Entries by Novices:** A Novice is anyone who has never won a blue ribbon in the artistic division of a gesneriad (including AV) flower show. Exhibitors wishing Novice Status for the Artistic Division may not enter other Division II classes.
- Class 66 Artistic entries suitable for any of the classes in Sections K, L, M, or N, except for Challenge Class 54. Exhibitor must identify, on a 3"×5" white card, the name of the class chosen and the plant material used.

Division III — THE ARTS

Exhibitors are required to reserve space (indicating the size of the exhibit) for entries in Sections P and Q. Limit: One entry per exhibitor per class. Reservations (deadline June 20, 2011) may be emailed to <kdc05@ptd.net> or sent to Karyn Cichocki, 79 Beaver Run Road, Lafayette, NJ 07848.

SECTION P — Photography: The subject must be identified on the entry card. Prints should not exceed 8"×10" and mats should not exceed 11"×14". Easels must be provided for all prints.

- Class 67 Color print of parts of a gesneriad (flowers, fruit, foliage, etc.).
- Class 68 Color print of a whole gesneriad plant.
- Class 69 Color print of gesneriad(s) growing in a natural habitat. The subject must be portrayed growing wild in an area of the world considered by botanists to be its natural range, not cultivated in pots, gardens, or greenhouses. A white card (maximum 8.5"×5.5") must be provided detailing location, climate, month/year photo was taken, how the site was accessed and any other pertinent information.
- Class 70 Monochrome print.

SECTION Q — Arts and Crafts Representing Gesneriads

- Class 71 Painting or drawing. (An easel must be provided by the exhibitor.)
- Class 72 Needlework or textile. (A 3"×5" white card must be provided giving the source of the design.)
- Class 73 Other arts and crafts.

Division IV — COMMERCIAL AND EDUCATIONAL

Reservations (deadline June 20, 2011) for Sections R and S must be sent to Elizabeth Varley, 2002 Orleans Road, Arden, DE 19810, phone 302-475-1098, or emailed to <evlw@earthlink.net>. One entry per exhibitor per class.

SECTION R — Commercial Displays

- Class 74 Display table with a grouping of gesneriads (10 or more plants).
- Class 75 Display table with a grouping of gesneriads (fewer than 10 plants).

SECTION S — Educational Exhibits

- Class 76 Exhibit illustrating phases of scientific or historical research or gesneriad promotion.
- Class 77 Exhibit of plant material with educational information.
- Class 78 Exhibit of photograph(s) of gesneriad plant material that because of its seasonal nature or rarity in cultivation is not often exhibited live. A white card (not to exceed 8.5"×5.5") must be provided outlining source, natural habitat, cultural information, and reason for suitability in this class.
- Class 79 Exhibit of photograph(s) of gesneriads growing outdoors as bedding, accent, or container plants. Gesneriad(s) must be identified and additional information included about climate, growing medium, culture, etc.

General Rules and Exhibitors Information

1. Each exhibitor must prepare a list of plants and other exhibits with the appropriate Section and Class numbers to facilitate the work of the Entries Committee. The Flower Show Committee will assist in identifying material unknown to the exhibitor. A computerized entry system will be used, and an entry form will be included in each registration packet. **Exhibitors must complete their entry forms and submit them at Registration on Tuesday or latest by 6:00 p.m. on Wednesday.** Your cooperation will help expedite the actual entries process for everyone.
2. All plant material must be free of insects and disease. All entries will be inspected, including those for exhibit only.
3. Entries shall be in accordance with the schedule and must be approved by the Classification Committee. Nonconformity to schedule may bring disqualification.
4. Exhibitors need not be members of The Gesneriad Society.
5. Entries will be accepted only during the hours specified. An exhibitor may request that an entry be accepted for exhibit only. Educational information should be provided where appropriate. These entries, and any arriving after the close of Entries, will be placed in a separate area of the showroom for exhibit only and will not be judged.
6. All entries will be staged in the showroom by the Placement Committee. Collections and artistic entries may be placed in the showroom by the exhibitor in the space designated and during the stated time for entries.
7. In fairness to amateur growers, institutions may not make more than two entries in each of the Horticulture, Artistic or Arts Divisions of the flower show. The same restriction applies to commercial growers whose employees assist with the culture and grooming of potential entries.
8. Classes may be subdivided or consolidated at the discretion of the Show Committee after entries close.
9. No entries may be removed from the showroom until the show closes. All entries must be checked out through the Show Committee.
10. Standard competitive judging, as established by The Gesneriad Society, will be used.
11. Awards will be made according to the following point scores: 1st, blue ribbon (90-100); 2nd, red ribbon (at least 80); 3rd, yellow ribbon (at least 70). Honorable Mentions may also be awarded.
12. Special Awards (more than a class ribbon) are reserved for Gesneriad Society members of record at the time of Flower Show entries, unless specifically offered to nonmembers. An exhibit must score 90 or above to be considered.
13. Awards for Best and runner-up to Best Gesneriad in Show in Division I, (excluding *Saintpaulia* hybrids) are given for horticultural perfection. These awards and those for Best in Divisions II, III and IV are reserved for Gesneriad Society members of record at the time of Flower Show entries. Exhibits in all Divisions must score 95 points or higher to be considered for these awards.
14. Sweepstakes and Runners-up to Sweepstakes awards for any Division require a minimum of three blue ribbons in a Division to be eligible. These awards are reserved for Gesneriad Society members of record at entries time.
15. The Gesneriad Society will endeavor to protect all entries, but assumes no responsibility for loss or damage.

Additional Horticulture Division Rules and Information

1. All plants must be grown by the exhibitor and have been in the exhibitor's care for at least 3 months prior to the show.
2. An exhibitor is limited to one specimen of the same plant per class. An exhibitor may submit more than one entry per class, provided each entry is a different cultivar, unless otherwise prohibited.
3. Exhibitors of *Saintpaulia* hybrids are required to respect size limitations as defined by the hybridizer as registered in the AVSA Master Variety List.
4. Exhibitors will be permitted to indicate the front of a horticulture entry.
5. No particular type of container is specified. All containers used must be clean. A protective container or cover made of transparent material to shield delicate plant material from dry air or cold drafts may be used for any exhibit requiring it. Such plants may be judged uncovered.
6. An exhibitor may provide educational information on a white 3"x5" card for any entry if desired.
7. All exhibits in flowering classes must have at least one fully opened flower.
8. Seed pods or fruit (not spent blossoms) are permitted on all gesneriads entered in the Horticulture Division. The exhibitor should realize when entering a blooming plant with seed pods or fruit that some judges could find them enhancements of, or detractions from, the plant's appearance.

Additional Artistic Division Rules and Information

1. Gesneriads must predominate.
2. While Saintpaulias are permitted in all artistic classes, the use of other gesneriads is strongly encouraged.
3. Other live and dried plant material is permitted but no artificial plant material is allowed.
4. Plant material used in the Artistic Division need not have been grown by the exhibitor.
5. All plant material used is to be identified on an accompanying white 3"x5" card. Supplemental titles or descriptions may be added but are not required.
6. Accessories are optional unless specifically required.
7. Table covers and niches will be neutral in color. Exhibitors may provide additional background.
8. Cut blossoms or plant material may be placed in artistic arrangements on Friday morning from 6:30 to 7:15 a.m.
9. In Section N, "Dimension" refers to the linear measurements of height, width and depth only.
10. Straight-sided terrariums are composed of flat pieces of glass or plastic. Curved terrariums have rounded pieces.

Additional Arts, Commercial and Educational Division Rules and Information

1. All entries must have been made by the exhibitor and feature gesneriads in some form.
2. Entries must not have been exhibited before in any Gesneriad Society Convention show.
3. Photography: The exhibit is being judged on the skill, technique and composition displayed, not on the quality of the plant material chosen as a subject, except for Class 68.
4. Educational exhibits may be entered by institutions, chapters, study groups or individuals. In Class 76, any project relating to gesneriads may be presented with illustrative material that may or may not include live plant material.

Convention Chairpersons

<i>Convention</i>	Paul Susi <convention@gesneriadsociety.org> 117-01 Park Lane South, Apt C1A Kew Gardens, NY 11418 347-809-4447
<i>Convention Coordinator</i>	Jeanne Katzenstein <jkatzenste@aol.com>
<i>Convention Registrar</i>	Mary Helen Maran <maranmh@tampabay.rr.com>
<i>Development Committee/Auction</i>	Suzie Larouche
<i>Shows & Judging</i>	Arleen Dewell
<i>Awards</i>	Jo Anne Martinez
<i>Local Convention Chair</i>	Charlene Marietti
<i>Artwork, Pamphlet & Packet</i>	Lynn Cook and Troy Ray
<i>Plant Sales</i>	Gary Hunter and Mary Schaeffer
<i>Publicity</i>	Judith Smith
<i>Speakers</i>	Paul Kroll
<i>Special Events & Transportation</i>	Stephen Maciejewski
<i>Table Favors</i>	Quentin Schlieder
<i>Treasurer</i>	Betsy Gottshall
<i>Volunteer Coordinator</i>	Lee Linett
<i>Flower Show Co-Chairs</i>	Russell Strover and Brian Connor
<i>Artistic Schedule & Reservations</i>	Karyn Cichocki
<i>Classification & Plant Inspection</i>	Bill Price and Vincent Woo
<i>Educational & Commercial</i>	Elizabeth Varley
<i>Entries</i>	Beverley Williams and Emma Bygott
<i>Judges & Clerks</i>	Doris Brownlie
<i>Placement and Staging</i>	Bayard Saraduke
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The Genus *Agalmyla*

Laurence E. Skog & Jeanne Katzenstein

***Agalmyla*:** Mostly climbing vines of about 100 species from Indonesia, the Philippines, and the Malaysian archipelago, in mountain forests above 1000 m, but usually not much higher, occasionally to about 1500 m. Where most species grow there is a definite rainy and dry season, but because the plants are forest dwellers they never get too dry. Tubular red/orange flowers are similar to those of *Aeschynanthus*. In the Old World tropics, the Malesian genus *Agalmyla* is the only genus consisting (with few exceptions) of true climbers rooting in the ground. A more complete picture of the genus can be found here.

Establishment of the Genus: *Agalmyla* Blume, Bijdr. Fl. Ned. Ind. 766 (July - Dec. 1826).

Etymology (history of the word): From the Greek *αγαλμα*, *agalma*, ornament; and *ὕλη*, *hule* [*hyle*], wood, forest; "ornament of the forest" because of the brilliant red flowers.

Synonyms: *Orithalia* Blume (1828), a later substitute name, *Dichrotrichum* Reinw. ex De Vriese (1856), (1919), *Tetradema* Schltr. (1920).

Infrafamilial position: (see below)

Placement of the Genus: Didymocarpoid Gesneriaceae – "Advanced Asiatic and Malesian genera" (Weber 2004).

Geographical Distribution: Malesia and Indonesia (Sumatra, Malay Peninsula, Borneo, Java, Sulawesi, New Guinea, and the Philippines).

Habitat: Occurring in lowland and mountain rainforests.

Habit: Perennial climbers with short roots produced along the stem, a few species are terrestrial shrubs. Leaves opposite, of herbaceous texture, usually strongly unequal (equal in a pair in the terrestrial species), larger leaf in a pair variable in shape and indumentum, smaller leaf scale-like and caducous or with short petiole and blade. Cymes axillary, subsessile to long-pedunculate; bracteoles variable in size and conspicuousness; flowers much congested. Sepals usually grown together, rarely free. Corolla usually with a distinctly curved tube; limb weakly to strongly bilabiate, the upper lip of 2 lobes and the laterals spreading, or the two upper and two lateral lobes forming the upper lip; mouth open or laterally compressed; color red, with or without black lines on the lobes, sometimes yellow in the throat; inside of the tube towards the base with (or without) a ring of hairs or with five patches of hairs. Fertile stamens 4, in two groups, in a few species only 2, exerted; filaments attached at middle of corolla tube, anthers syntheticous, if four then those of the shorter stamens sometimes smaller, coherent in pairs by their apices, thecae parallel, dehiscent longitudinally. Nectary annular to cupular. Ovary slender-cylindrical, often stipitate; stigma bilobed, with two large lateral lobes. Capsule elongate, cylindric, dehiscent by two and then four valves. Seeds with a filiform appendage at each end, the apical one brown, the hilar one hyaline; seed attached at the base of, or near the top of the hyaline appendage. In many Didymocarpoid Gesneriaceae the capsule is

elongated and pod-like (in some species of *Aeschynanthus* and *Agalmyla* to more than 40 cm long).

Pollinators: Size, shape, and coloration of the flowers indicate pollination by birds.

Chromosome number: $2n = 32$.

Type species: *Agalmyla parasitica* (Lam.) Kuntze

Species: 96 (Hilliard & Burtt 2002).

Species names: See Skog, L.E. & J.K. Boggan. 2005: World checklist of Gesneriaceae <<http://persoon.si.edu/Gesneriaceae/Checklist>>. Only one species is in very limited cultivation in North America: *Agalmyla parasitica* (Lam.) Kuntze



Agalmyla parasitica illustrated as *Agalmyla staminea* in Paxton's Magazine of Botany, Vol. XV, pl. 73, 1849.

Common Names: unknown.

Notes: Hilliard & Burtt (2002) subdivide the genus into three sections:

- (1) sect. *Agalmyla* (strongly anisophyllous, minor leaf scale-like, inflorescence sessile or subsessile, annulus or patches of hairs in corolla tube present, stamens 4 or 2, long exserted; Malay Penins., Sumatra, Java, Borneo, Palawan),

- (2) sect. *Exannularia* Hilliard & Burt (anisophyllous, minor leaf with petiole and blade, corolla without annulus; Sulawesi and nearby islands),
- (3) sect. *Dichrotrichum* (De Vriese) Hilliard & Burt (habit as in sect. *Exannularia*, infl. mostly pedunculate, stamens always 4, not or scarcely exerted, corolla with annulus or five patches of hairs; Philippines, Moluccas, New Guinea).

Thus the first section occurs only west, and the two other sections only east of Wallace's line. *Agalmyla* seems remotely allied (and not as close as suggested by the similar corolla shape and color) to *Aeschynanthus*, but differs essentially in most species (a) in the climbing (vs. epiphytic) habit, with the stem rooting in the soil and clinging to bark of the host tree by numerous short roots, and (b) in the strongly anisophyllous leaves.

Selected references:

- Backer, C.A. & R.C. Bakhuizen van den Brink. 1965. Gesneriaceae, pp. 518-534. In: Flora of Java, volume 2. Nordhoff: Groningen, Netherlands, reg. rev.
- Burt, B.L. 1968. Studies in the Gesneriaceae of the Old World XXIX. A reconsideration of generic limits in tribe Trichosporeae. Notes Roy. Bot. Gard. Edinburgh 28: 219-225, notes
- Burt, B.L. 1992. Gesneriaceae of the Old World III. New species and varieties from Borneo, chiefly from Mt. Kinabalu. Edinburgh J. Bot. 49: 285-296, new species.
- Hilliard, O.M. & B.L. Burt. 1999. Towards a revision of *Agalmyla* (Gesneriaceae). Blumea 44: 381-389, new species.
- Hilliard, O.M. & B.L. Burt. 2002a. The genus *Agalmyla* (Gesneriaceae-Cyrtandroideae). Edinburgh J. Bot. 59: 1-210, rev.
- Hilliard, O.M. & B.L. Burt. 2002b. A new species of *Agalmyla* (Gesneriaceae) from Sulawesi. Edinburgh J. Bot. 59: 323-324, new species.
- Middleton, D.J. & S.M. Scott. 2008. A new species of *Agalmyla* (Gesneriaceae) from Sulawesi. Edinburgh J. Bot. 65: 49-52, new species.
- Ridley, H.N. 1923. Gesneriaceae, pages 495-547. In: Flora of the Malay Peninsula, volume 2. Reeve & Co.: London, U.K., reg. rev.
- Rosser, E.M. & B.L. Burt. 1969. Studies in the Gesneriaceae of the Old World XXX. Notes Roy. Bot. Gard. Edinburgh 29: 39-58, anat.
- Weber, A. 2004. Gesneriaceae, pp. 63-158. In: Kubitzki, K. & J.W. Kadereit (eds.), The families and genera of vascular plants. Volume 7, Flowering plants, Dicotyledons: Lamiales (except Acanthaceae including Avicenniaceae). Springer Verlag; Berlin & Heidelberg, Germany.

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How I grow *Agalmyla parasitica*

Bill Price <billprice@telus.net>
West Vancouver, British Columbia, Canada

This interesting species originates from Indonesia and perhaps other areas of the Malay Peninsula. It grows at altitudes higher than 1000 meters in somewhat cool, moist forests of evergreen trees. I surmised that, similar to the genus *Aeschynanthus*, it grew epiphytically.

I received my plant as a seedling from Karyn Cichocki in 2007. Initially, due to its small size, it was grown covered. It grew slowly but eventually was large enough to grow open under 2 tubes.

With its native habitat in mind, I tried to create similar growing conditions. I used a very light open mix consisting of 1/3 each by volume of reconstituted New Zealand sphagnum moss pellets, perlite, and vermiculite. Watering was done twice a week and fertilizer applied weekly with several commercially available fertilizers (such as 20-20-20, 15-30-15 and "fish") used in rotation at 1/4 strength.

For the first couple years, it grew well on a lower shelf under 2 tubes of fluorescent light, on for 12 hours per day. The temperature ranged from 18-22°C (64-72°F) in winter and 21-28°C (70-82°F) in summer.

About two years ago I decided to move it into a shaded part of the greenhouse. At that time, I potted it into a clay pot using a mix composed of 2/3 of my regular mix and 1/3 coarse pumice, to make the mix even more open and well draining. In this environment, the humidity was good and the night temperatures tended to be lower by a couple degrees as well. For the first year or so, it was grown hanging and grew vigorously. Clusters of numerous flowers were produced in the leaf axils during the summer.

Then about a year ago I decided to try growing it upright on a trellis. I chose a sturdy metal frame on which the thick stems were wound and tied for support. Regular turning and frequent tying of the stems were necessary to achieve even distribution of growth around the trellis. The flower clusters began to develop in late May and were in bloom from mid-June on.



Although tending to be a large-growing plant, I would encourage growers to try it as the display of large, brilliantly colored flowers and large shiny green foliage is spectacular.



Agalmiyla parasitica entered by Bill Price was awarded Co-Runner-Up to Best in Show and Best Old World Gesneriad at the 2010 Convention Flower Show

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Agalmyla clarkei and *A. chorisepala* – Two Spectacular Species of Gesneriaceae from the Philippines

Ravan Schneider <ravan.schneider@gmail.com>
Mindoro, The Philippines

Anton Weber <anton.weber@univie.ac.at>
Faculty Center of Biodiversity, University of Vienna, Austria

The Philippines, a Southeast Asian wonderland consisting of more than 7,000 islands, is still little known with regard to gesneriads. Since the treatment of the family in Merrill's "An Enumeration of Philippine Flowering Plants" (1923) little progress has been made in the exploration and taxonomy of Philippine gesneriads, as compared to other countries of East and Southeast Asia. Moreover, there is little public notice of the botanical treasures of these islands. Even species that are frequent and well known for a long time have not entered broad awareness, and there are few Philippine gesneriads in cultivation.

In this article, two magnificent species from the genus *Agalmyla* are addressed and illustrated: *A. clarkei* and *A. chorisepala*. The photos have been taken in the field by the first author, who has lived on the island of Mindoro for many years.

The genus *Agalmyla* is a large genus of Old World Gesneriaceae that was neglected for a long time. It was established in 1826 by the German-Dutch botanist Carl Ludwig Blume (1796-1862). Though other independent genera (*Dichrotrichum*, *Tetradema*) have been included (Burt 1968), the number of species amounted only to some 30 until recently. The revision of the genus by Hilliard & Burt (2002) resulted in an explosion of the number of species. The authors described fewer than 62 species as new. Together with recent additions by Middleton & Scott (2008), the total species' number is now about one hundred. Distribution is from Sumatra to the Moluccas and New Guinea and from the Philippines south to Java and Sulawesi.

With a few exceptions, the species of *Agalmyla* are climbers, rooting in the soil and clinging with short roots to the bark of host trees. The leaves are opposite, but one of a pair is usually smaller and even may be reduced to a scale-like structure. The flowers are produced in dense clusters in the axils of the (larger) leaves and are usually brilliant red. These spectacular flower clusters apparently suggested the generic name. It is derived from the Greek *αγάλμα*, *agalma*, ornament, adornment and *ὕλη*, *hule* [hyle], wood, forest, and thus means "adornment of the forest."

Hilliard & Burt (2002) subdivided the genus into three sections: (1) sect. *Agalmyla*, (2) *Exannularia*, and (3) *Dichrotrichum*, each with distinct morphology and phytogeography. Most (13) of the Philippine species belong to section *Dichrotrichum*, only one to sect. *Agalmyla* (*A. biflora*), and none to sect. *Exannularia*. The characters and the geographical distribution of the sections are given in Table 1.

Table 1. Sections of *Agalmyla*: characters and distribution

- (1) **sect. *Agalmyla*.** Leaves of a pair strongly unequal, the smaller leaf scale-like; inflorescences sessile or subsessile; corolla tube with a ring of hairs or five patches of hairs inside; stamens 4 or 2, long exserted. Distribution: Sumatra, Malay Peninsula, Java, Borneo, Philippines (Palawan).
- (2) **sect. *Exannularia*.** Leaves of a pair almost equal to strongly unequal, but smaller leaf always with petiole and blade; corolla without ring or patches of hairs. Distribution: Sulawesi and nearby islands.
- (3) **sect. *Dichrotrichum*.** Habit as in sect. *Exannularia*, inflorescences mostly pedunculate, stamens always 4, not or scarcely exserted; corolla with a ring or five patches of hairs. Distribution: Philippines, Moluccas, New Guinea.

In the Philippines, sect. *Agalmyla* is represented only by a single species (*A. biflora*, on the island of Palawan), while there are 13 species of sect. *Dichrotrichum*, and none of sect. *Exannularia*.

The two species treated here belong to sect. *Dichrotrichum*. They have been located and photographed in the wild by the first author, and identified as *Agalmyla clarkei* and *A. chorisepala* by the second author. In the following some brief information is given, mainly from Hilliard & Burt (2002).



Montane landscape northwest of Puerto Galera, Mindoro Island, the Philippines where *Agalmyla clarkei* and *A. chorisepala* occur in the cloud-covered, forested ridge (around 1000 m) in the background.

***Agalmyla clarkei*.** This species is exceptionally spectacular due to the contrast coloration of the corolla and bracteoles, pedicels, and sepals. The latter are purple-red, while the corolla – as an exception in the genus – is yellow, with a single brown stripe in the middle of the three lower lobes. As usual, the corolla is curved, and the stamens are long exserted. There are four stamens, in two pairs, with the anthers fused at the tips.



Agalmyla clarkei grows as an epiphyte on tree trunks and branches (unlike the typical climbing habit of most species)



The long seed pods (not yet opened) of *Agalmyla clarkei*

The species was first described as *Dichrotrichum clarkei* by Elmer (1908) and transferred to *Agalmyla* by B.L. Burt (1968). The specific epithet honors the British botanist and gesneriologist Charles Baron Clarke (1832-1906). The species is exceptional in several respects, not only by the yellow corolla color (otherwise bright red in the genus), but also by the habit. It is not a climber, but a terrestrial or epiphytic subshrub. The two leaves of a pair are fully developed, and the size difference is not very marked, the size of the smaller leaf ranging from half as long to almost as long as the larger leaf. Their surfaces are densely villous. The flowers are in sessile clusters [much condensed pair-flowered cymes, see analysis of *Agalmyla tuberculata* in Weber (1982)], with conspicuous bracteoles enclosing the flowers. The largest are the first pair of bracteoles (prophylls of first order), followed by two pairs of successive bracteoles. In that way, each flower cluster is embraced by six bracteoles. In bud stage, the bracteoles completely enfold the young flower buds. The color of the bracteoles, as well of the sepals, is a deep or light purple or wine-red, but never green.

Less spectacular in color, but most interesting is the photo of a fruiting plant. The fruits are thin, cylindrical capsules, reaching almost 40 cm in length, resembling much the elongated capsules of *Aeschynanthus*. They are said to be densely pubescent by Hilliard & Burt (2002), though the ovary is said to be glabrous. Thus, the hairs seem to develop only after pollination.

Agalmyla clarkei is widespread in the Philippines, being known from the islands of Luzon, Leyte, Biliran, Mindanao, and Mindoro. Not unexpectedly, there is some variation over the distribution area, relating to the size and coloration of the flower. The latter has been given as green, lime-green,

greenish-yellow, yellow, and greenish-white. Reports of red, reddish, pink, pinkish (from Luzon collections) most probably do not refer to the corolla of open flowers, but to the conspicuous bracteoles and sepals.

Ecologically, *Agalmyla clarkei* is a plant of montane forests, occurring from ca. 600 to 1,500 m above sea level.

Apart from a flower drawing in Hilliard & Burtt (2002), no illustrations seem to have been published in the literature so far. The photos presented here are probably the first ones published in print. However, photos or slides of a variant with green flowers and brown bracteoles have already been taken by an "unknown photographer" (?Mary Mendum) at the Royal Botanic Garden Edinburgh, and have been posted under "*Agalmyla* species 119" by Ron Myhr on the "Gesneriad Reference Web" <www.gesneriads.ca>.

***Agalmyla chorisepala*.** This is another spectacular *Agalmyla* species from the Philippines, but has more typical characters of an *Agalmyla* than *A. clarkei*. Firstly, it is a typical climber, secondly, the flowers are red (varying from orange to dark crimson), clearly suggesting pollination by birds. (This certainly also holds true for *A. clarkei* with the purple/yellow contrast coloration.)

The flower clusters (again much condensed pair-flowered cymes) are exposed on long peduncles, which is the case in quite a number of species of sect. *Dichrotrichum*. The exposure obviously makes the flower more visible and accessible to the pollinators, and the peduncle probably serves as a perching place.



Agalmyla chorisepala grows as a climber with its showy flower clusters displayed on long peduncles

The species seems to be rather common and has a wide distribution in the Philippines (Luzon, Mindanao, Mindoro). Like *Agalmyla clarkei*, it is a plant growing in montane forest, with an altitudinal range from ca. 550 – 1,400 m above sea level. It also was described first as a species of *Dichrotrichum* (Clarke 1883), but was recently transferred to *Agalmyla* by Hilliard & Burt (2002). The distinctive feature addressed in the name (*chorisepalus*, -a, -um = sepals free, not fused to form a tube as in the bulk of *Agalmyla* species) is shared with another species from the Philippines: *A. calelanensis*. This latter species is known only from Mt. Apo on Mindanao, and differs by the long shaggy hairs on the sepals, which, in addition, are often apically toothed. Whether this latter taxon merits specific rank indeed, or is simply a local variant, cannot be decided at the present.

As in the case of *Agalmyla clarkei*, no photographs seem to have been published in print. For many years plants have been cultivated in the Royal Botanic Garden Edinburgh, and photos taken there have been posted by Ron Myhr on the "Gesneriad Reference Web." The photos published here were taken in the wild and demonstrate that the flower clusters are equally (if not more) spectacular than those in cultivation.

Cultivation. Seeds of *Agalmyla clarkei* have been sent by the first author to the Botanical Garden of the Vienna University. They germinated freely, showing the typical phenomenon of "anisocotily" (unequal size of the two cotyledons, characteristic of all Old World Gesneriaceae) in a very early stage (the larger cotyledon measuring just 1 to 2 mm). No prediction can be made until plants can be raised that are vigorous enough to come to flower. However, if cultivation succeeds, seeds and/or plantlets will be distributed to other institutions, growers, and plant enthusiasts. This is not only a courtesy, but an approved strategy to maintain species of particular interest or beauty in permanent cultivation. If a plant is lost in one place, it may survive in another. At the moment, distribution is little more than a dream for the future. The next months and years will show whether this spectacular species will thrive well in cultivation, thousands of kilometres away from its home and the place where it evolved in nature.

References:

- Burt, B. L. 1968: Studies in the Gesneriaceae of the Old World. XXIX. A reconsideration of generic limits in tribe Trichosporeae. Notes Roy. Bot. Gard. Edinburgh 28(3): 219-225.
- Clarke, C. B. 1883: Cyrtandreae. In A. & C. De Candolle. Monographiae phanerogamarum. Vol. 5(1). Paris.
- Elmer, A. D. E. 1908: A century of new plants. Leaflet. Philipp. Bot. 1: 272-359.
- Hilliard, O. M. & Burt, B. L. 2002: The genus *Agalmyla* (Gesneriaceae-Cyrtandroideae). Edinburgh J. Bot. 59(1): 1-210.
- Merrill, E. D. 1923: An enumeration of the Philippine plants. Vol. 3. Manila: Bureau of printing.
- Middleton, D. J. & Scott, S. M. 2008: A new species of *Agalmyla* (Gesneriaceae) from Sulawesi. Edinburgh J. Bot. 65: 49-52.
- Weber, A. 1982: Evolution and radiation of the pair-flowered cyme in Gesneriaceae. Austral. Syst. Bot. Soc. Newsl. 30: 23-41.

(All photos included with this article, as well as those on the front and back covers, by Ravan Schneider, courtesy of Anton Weber)

Botanical Review No. 36

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Stow, Massachusetts, USA

(Several of the papers in this review are in Brazilian Portuguese, a language that I do not speak. I hope that I have understood them correctly.)

- Gesneriaceae da Cadeia do Espinhaço de Minas Gerais, Brasil. **Araujo, A. O., Souza, V. C. & Chautems, A. Revista Brasileira de Botânica 28: 109-135. 2005.**

This paper provides descriptions, keys, distribution maps, and useful illustrations of the 21 species of gesneriads found in the Espinhaço Range in Brazil. This region includes an altitude range of 800-200 m, with both rocky fields and cloud forest. The rainfall is seasonal, with a few dry months in "winter."

The genera (and number of species) found in this region are *Sinningia* (9), *Paliavana* (4), *Codonanthe* (1), *Nematanthus* (4), *Gloxinia* (now *Sphaerorrhiza*) (1), and *Anetanthus* (1).

Anetanthus gracilis, which is not in cultivation so far as I know, is a small plant (3-13 cm high) with tiny white flowers. It is found in wet ravines and on shaded cliffs. Flowers and fruits are found in the summer wet season.

- Developmental morphology of the Asian one-leaf plant *Monophyllaea glabra* (Gesneriaceae) with emphasis on inflorescence morphology. **Ayano, M., Ryoko, I., & Kato, M. Journal of Plant Research 118: 99-109. 2005.**

This paper discusses details of the growth pattern of this unusual species. The embryo has two cotyledons, one of which grows to form the "leaf" with a length of more than 5 cm (two inches).

They grew their study specimens from seed in a phytotron growth chamber. They used pots of vermiculite with 12-hour illumination at 25°C. They did not mention the humidity, but it was probably high. Under their conditions, germination started within three days and the plants grew from seed to maturity within two months!

An interesting feature is that when one plant in a pot reached maturity and initiated the flowering sequence, the other plants in the same pot also started flowering, even if those plants were rather undersized. The mechanism is not known. There is a research opportunity here.

- Untangling Gloxinieae (Gesneriaceae). II. Reconstructing Biogeographic Patterns and Estimating Divergence Times Among New World Continental and Island Lineages. **Roalson, E. H., Skog, L. E., and Zimmer, E. A. Systematic Botany 33: 159-175. 2008.**

This paper discusses the issue of when and where the various members of the tribe evolved. The authors use DNA evidence and geological evidence to suggest two attractive hypotheses regarding the early home of the tribe and movements of parts of the group from one geographic region to another. An origin in Central America seems likely.

- The Wild African Violet. *Saintpaulia* (Gesneriaceae). An Interim Guide. **Watkins, C., Kolehmainen, J., Schulman, L. Worldstage Cambridge, UK. 2002. ISBN 0-9544081-0-1.**

This booklet provides pictures, descriptions, and distribution location maps for the species of African Violets as they were understood at the time. It also includes a brief historical summary and discusses some conservation issues.

It is quite readable, and could be useful to growers who want to confirm or contest the labels on their plants, but it may be difficult to find a copy.

• Gesneriaceae endêmicas del Perú. **Salinas, I. & León, B. Revista peruana de Biología 13(2): 359s-365s. 2006.**

This paper lists the 36 species and three varieties that are found only in Peru (more than half of them are in the genus *Besleria*). Information on the locations of herbarium collections and on current conservation status is included.

Almost none of these plants are in general cultivation; *Columnnea purpureovittata* is probably the only one whose name will be widely known.

• Controle da Contaminação do Cultivo de *Sinningia aghensis* Chautems *in vitro*. **Cano, D. C., Peterle, L. P., and Cuzzuol, G. R. F. Revista Brasileira de Biociências 5: 891-893. 2007.**

Cultivation of plant material *in vitro* is a form of vegetative reproduction. Very small pieces of plant material can be used, which allows for the production of a large number of new plants from a small amount of starting material.

The plant material is placed in a sterile container with a solution of nutrient materials and plant growth hormones designed to provide rapid growth. The solution may be left as a liquid or gelled with agar.

Bacterial and fungal contamination of the incoming plant material is a serious problem. Plant material will normally have contamination on the surface. If even a tiny amount of microbial material gets into the nutrient solution it will grow rapidly, and will soon overwhelm and destroy the desired plant material.

Procedures for disinfecting the plant material generally involve washing with substances such as detergent, bleach, and alcohol. Determining the correct sequence of washes, the correct times, and the correct concentrations is vital. Too little disinfection results in contamination, but too much can kill the desired plant material.

Plant material with hairs on the surface creates a particular problem. The hairs keep the disinfecting solutions from washing the surface well, and provide extra surface area to trap contaminants.

This paper reports on the results of trying several disinfection schemes using pieces of leaves from *Sinningia aghensis* as the test subject. This species is said to be endangered by habitat destruction.

Their best treatment for leaf pieces required a detergent wash, then 20 minutes in straight bleach, then one minute cleaning with 70% alcohol, then rinse in sterile distilled water. Even with this treatment half the samples failed. Lower concentrations of bleach resulted in essentially total failure. Even shaving the leaf hairs with a razor before treatment did not greatly improve the results.

By far the best disinfection results were obtained by using a short piece of the central leaf vein and slicing off the entire outer surface. These pieces were then treated as above. With this method contamination was below 20%. However, the drastic treatment prolonged the time needed to form callus tissue, which reduced the survival rate of the samples due to tissue necrosis.

• Umidade do solo e sua influencia no estabelecimento de duas espécies rupestres (Gesneriaceae) endêmicas de Minas Gerais. **Ranieri, B. D., França, M. G. C., and Pezzini, F. P. Revista Brasileira de Biociências 5: 3-5. 2007.**

The "campos rupestres" habitat is a rocky field scrubland at altitudes above 900 m near coastal mountains in southeastern Brazil. It contains many species that are found nowhere else.

This paper studies the influence of the annual variation in soil moisture on two gesneriad species that both occur in this region, but with different degrees of rarity. The authors suggest that seedling survival rates, which can partly depend on the ability of the soil to hold moisture, may help determine rarity.

Paliavana sericiflora is a good-sized (10-150 cm tall) herb in the *Sinningia* Tribe. It has a perennial stem and deciduous foliage and likes to grow in soil pockets between rocks in humid ravines.

Sinningia rupicola is another rock-growing plant with a perennial tuber and deciduous foliage. It apparently grows only in fissures in hematite rocks.

In 2005 (apparently January, though I must have missed any explicit statement of this) the authors sowed seed of each species in pots containing the two soil types typically used by each species, and placed the pots in the field near adult plants of each species. They observed rainfall, soil moisture, seed germination, and seedling growth.

Precipitation in this region is strongly seasonal. The summer rainy season that year occurred during January through March plus November and December, and was quite wet by my Boston, Massachusetts USA standards. December in their study area had over 500mm (20 inches) of rain that year. The dry season was from June through August, with about 20mm (one inch) of rain per month.

Soil moisture level tends to follow rainfall levels, not surprisingly. The soil type where *Sinningia rupicola* grows becomes wetter during the wet season than the soil type where *Paliavana sericiflora* grows. Both types become quite dry during the dry season. To say the same thing another way, the moisture level in the soil of the *Sinningia* is more variable.

Seedling survival was checked every 30 days. *Paliavana sericiflora* seeds germinated four months after planting. *Sinningia rupicola* seeds germinated four to five months after sowing. It seems odd to me that seeds would be designed to germinate just at the beginning of the dry season; perhaps there is some good reason for this behavior, or perhaps I misunderstood something in the paper.

Paliavana sericiflora had a higher initial germination rate, but a lower survival rate (about 1%) after 12 months than *Sinningia rupicola* (almost 5%).

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Flower of \times *Simvana*
'Mount Magazine'

×*Sinvana* 'Mount Magazine'

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Bill Price's recent Gesneriad Hybridizers Association award for the best newly registered hybrid at the 2010 Vancouver Convention prompted Dale Martens to request an article from me concerning the genesis of this plant. ×*Sinvana* 'Mount Magazine' is my first registered gesneriad hybrid so its popularity with growers is quite pleasing to me.

The intergeneric hybrid was the result of crossing *Sinningia conspicua* with *Paliavana tenuiflora*. Both parent plants of the hybrid are native to Brazil. The name 'Mount Magazine' popularly refers to the highest mountain (elevation 2753 feet) found in the state of Arkansas. Had I been geographically correct, the name of the cross should have been Magazine Mountain.

The yellow-flowered *Sinningia conspicua* was originally obtained from Kartuz Greenhouses in Vista, CA while the lavender-flowered *Paliavana tenuiflora* was obtained from Yucca Do Nursery in Giddings, TX. Flowers of *S. conspicua* were emasculated upon opening 7 July 2004. The flowers were pollinated 9 July 2004 with pollen from *P. tenuiflora*. (The reciprocal cross was also attempted but it was not successful.) A single capsule was harvested from *S. conspicua* on 26 August 2004. Microscopic examination of the seed was not promising, and it appeared the seed was only chaff, devoid of embryos. However, the contents of the entire capsule were sown. Surprisingly a single seedling was produced. The plant grew slowly through the winter of 2004-05. Growth accelerated in the spring of 2005, and the first flower was produced 6 July 2005. The corolla on the salverform flower of the F1 hybrid was white in color and intermediate in shape between the parents. A fine network of purple veins appeared in the throat of the flower and this color bled through, flushing the corolla base lavender. Flowering continued through the remainder of the summer into fall. The plant was grown for an additional year for continued evaluation and propagation prior to registration.

Under our greenhouse conditions (50°F minimum), the plant is semi-dormant in winter. Below-ground, a tuber forms. Growth resumes in the spring. In habit, the vegetative growth of the F1 resembles the *Paliavana* parent but is half the size of the male parent. Flowering begins in early summer and two to three flowers are produced from each node at the top of the stem. Each flower lasts three to four days. Flowers are sweetly fragrant in the morning hours. Both photoperiod and temperature affect flowering as the plants in my office flower throughout the year, especially if I work late and leave the lights on.

Propagation of ×*Sinvana* 'Mount Magazine' is simple. Terminal cuttings taken in spring produce roots readily, typically in six weeks. They flower the following summer and then form tubers. I have also been successful producing this plant in tissue culture. It is so easy that I use it in my plant propagation classes at the University of Arkansas. Students practice their tissue culture skills with this plant during the lab then have a flowering plant to take home by the end of the semester.

My attempts toward additional hybridization with 'Mount Magazine' have been unsuccessful, and I initially thought the plant was sterile. Dale Martens proved me wrong as she produced an attractive small hybrid by crossing *Sinningia* 'Los Angeles' with pollen from \times *Sinvana* 'Mount Magazine'. I continue to try different combinations of crosses with 'Mount Magazine', still without success. However, even if it never makes a successful hybrid for me, I'll appreciate the cross for its own ornamental worth and thank Bill Price for growing and exhibiting such a beautiful specimen of the hybrid.



\times *Sinvana* 'Mount Magazine' grown by Bill Price and awarded Best Recently Registered Hybrid at the 2010 Convention Flower show in Vancouver

Back to Basics: Sowing Seeds and Growing Seedlings

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The previous article in this series of columns focused on how to harvest and store gesneriad seeds. Now let's sow seeds. I've not found gesneriads to be too fussy about the type of soilless mix used for sowing, so use whatever you have or a 50/50 mix of vermiculite and perlite. Put about 3/4 inch of moist, but not soaking wet mix in the bottom of a small, plastic container with a clear lid. Do not use fertilizer. Sprinkle the seeds on top of the mix, but do not add more soil. Put the lid on and don't put the container in direct sunlight. Write the name of the species or parents of the cross and the sowing date on the container. Wait three days to three weeks for most to germinate, but keep the mix moist for at least three months for the more tardy seedlings.

Let's chat about growing seedlings. The key to success is transplanting often. I transplant within seven days of germination. Yes, they are very tiny, but it is important to their growth to be moved within the first three weeks, even if all you do is to lift each one and put it back down. When the seedlings are one week old, I use a toothpick and separate the seedlings, which are usually very crowded. I lift each one and place it elsewhere in that same seedling container. You may need a second toothpick to do this step since there are times a seedling sticks to the first toothpick. Add some drops of water if the soilless medium seems too dry. The seedlings need moist, but not soaking wet soil. Do not add fertilizer at this time.

Two weeks after the first transplanting, the three-week-old seedlings should be transplanted into a different container. Whether you wish to use a community container, a small pot, or a small greenhouse container, the seedlings continue to require high humidity. I prefer to use a small commercial greenhouse tray with a lid. The containers I use are those 1-1/2 inch square cell packs that have nine cells. I put about 3/4 of an inch of moist perlite in the bottom of each cell. Then I put a moist mixture of 50% vermiculite and 50% of my regular soilless mix on top of the perlite until the individual cells are filled. It is perfectly fine if you have a commercial soilless mix with a small amount of fertilizer in it already. (The commercial mix I use has fertilizer added with 0.21% nitrogen as opposed to my usual fertilizer which is 21% nitrogen.) Depending on the size of the three-week-old seedlings, I put anywhere from four to nine per cell. Do not use water with fertilizer in it, as you will very quickly get algae on the surface of the mix.

At six to seven weeks old, most rhizomatous gesneriads and Sinningias will be growing fast enough that the cotyledons (first leaves) can be removed. Removing them and burying the plant deeper in the pot allows the production of roots around the stem where the cotyledons used to be. Therefore, with the exception of *Streptocarpus* seedlings, I often remove the cotyledons with a tiny pair of sharp scissors and transplant the seedlings deeper in the pot, but use that same 50/50 mix mentioned previously.

Pot the seedlings deeper than where the cotyledons were with the soil line up to the base of the lowest set of leaves. If the seedlings are too small to remove the cotyledons, then I do that step at nine weeks and I place only two



Episcia siblings all the same age. The ones on the right still have the cotyledons attached. The ones on the left had the cotyledons removed prior to transplanting. The center seedlings were never transplanted, but kept moist.

to four seedlings per cell depending on the size of the seedlings. Do not remove any leaves from Streptocarpus seedlings at this time. Just transplant them being careful not to bury the Streptocarpus seedlings deeper than the base of the plants. They will rot if buried too deeply. Give them a non-urea balanced fertilizer at the rate of 1/8 teaspoon per gallon of water. I grow gesneriads on plant stands under fluorescent tube lights and continue to raise the seedlings in high humidity with a dome on the greenhouse tray.

When the seedlings are nine to ten weeks old, then use whatever mix you normally use for growing mature gesneriads and pot one or two seedlings per pot. I put 1/2 inch of moist perlite in the bottom of each pot, which is no larger than 2-1/2 inches, or I use a 3-ounce plastic bathroom cup. If you normally wick water, then set up the seedlings with wicks. At this time if you have Smithiantha, Eucodonia or Achimenes seedlings, remove the bottom two to four leaves and bury the seedling deeper into the pot, up to the base of the lowest set of leaves. At nine weeks, I remove the smallest leaf on non-unifoliolate Streptocarpus seedlings. If left on the plant, that leaf will always be underdeveloped. Often I cut in half the largest Streptocarpus leaf on each seedling. This seems to stimulate the plant to grow quickly. Again, be careful not to bury Streptocarpus seedlings deep in the soil. At this time I usually put all the seedling pots in a community tray and continue giving fertilizer at the rate of 1/8 teaspoon per gallon of water. The plants have been used to high humidity and will go into deep shock unless acclimated slowly to room air.

Picture a community tray with small pots. In the corner pots and in the center two pots I place a single plastic drinking straw cut five to six inches long or at least two inches higher than the tallest seedling in each pot. Push the straws down to the bottom of the pots. Lay a long piece of clear plastic

wrap over the straws. Pour water with fertilizer in the bottom of the tray to a depth of 1/4 inch and add a little bit of water each day so the tray is barely covered with water. The water in the tray and the plastic wrap give the plants extra humidity, but because you put perlite in the bottom of each pot, the soil will not be soaking wet. Beginning on the seventh day, allow the bottom of the tray to go dry and remove the plastic wrap and straws when the tray's bottom has been dry for two days. The soil in the pots should still be moist. Then keep the pots in the community tray, place each on a saucer, or begin to wick water them. Now is when the fertilizer rate can be increased to 1/4 teaspoon per gallon of water.

I keep hybrid seedlings in the 2-1/2 inch pots until they bloom, no matter what the genus is. After I see the flower, then I decide if they decorate the compost or if they get transplanted into a larger pot and grow to their maximum potential. For *Sinningia speciosa* and any of the taller growing genera you may want to remove the bottom two to four leaves and pot the plant deeper in the larger pot. Under ideal conditions, Sinningias on the average take between five and seven months to bloom from seed with miniature Sinningias only taking four months. I've gotten *Sinningia pusilla* from seed to bloom in 70 days. Streptocarpus hybrids take between four to five months to bloom, but species can take a year or more. Rhizomatous gesneriads take about six to seven months to bloom and it is best if the process for them begins in the winter since decreasing daylight often triggers the start of dormancy during the fall. Episcias grow quickly, but first flowers are often not seen until the seedling is eight to nine months old if stolons are kept to a minimum.

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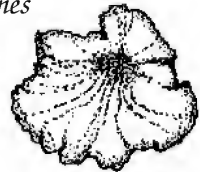
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- Michigan **Southeastern Michigan** — Richard Holzman, 3836 Jennings, Troy, MI 48083
- Minnesota **Twin Cities Area** — Sue Chorn, 105 Stinson Blvd., New Brighton, MN 55112
- Missouri **Gateway West** — Gary Dunlap, 4189 Jarvis Road, Hillsboro, MO 63050
- Nebraska/Iowa **Omaha** — Tom Bruning, 31233 Beechnut Rd., Treynor, IA 51575
- New Hampshire **Granite State AV & Gesneriad Society** — Barbara Spofford, 3 Libby Dr., Biddeford, ME 04005
- New Jersey **Frelinghuysen Arboretum** — Mary Lou Robbins, 21 Overlook Rd., Boonton Township, NJ 07005
- New York **AV and Gesneriad Society of Western New York** — Paul Kroll, 4325 Two Rod Rd., East Aurora, NY 14052
Gesneriad-Dicts of Western New York — Laura Buckner, 15384 Marsh Creek Rd., Kent, NY 14477
Greater New York — Paul Susi, 117-01 Park Lane South, Apt. C1A, Kew Gardens, NY 11418
Long Island — Ben Paternoster, 14 Coptor Ct., Huntington, NY 11743
Vestal AV & Gesneriad Society — Colin Dimon, 833 E. Circle Dr., Vestal, NY 13850
- Oregon **Mt. Hood** — Hal Shrauger, 18707 NE Deer Haven Dr., Newberg, OR 97132
- Pennsylvania **Liberty Bell** — Russell Strover, 272 Yorkshire Drive, Newtown, PA 18940
- Tennessee **Tennessee** — Pam Braun, 5528 Pinewood Rd., Franklin, TN 37064
- Washington **Puget Sound** — Rohm Gustafson, 158 18th Ave., Seattle, WA 98122
- Washington, DC **National Capital Area** — Jim Roberts, 2408 Henson Dr., Marriottsville, MD 21104
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Toronto — Paul Lee, 6693 RR #3, Fergus, Ontario N1M 2W4 Canada
Vancouver AV & Gesneriad Society — Arleen Dewell, #311-2366 Wall St., Vancouver, BC, Canada V5L 4Y1
- Sweden **Gesneriasts of Sweden** — Ywonne Fors, Kvamforsv. 16, 784 66 Borlänge, Sweden

Go to www.gesneriadsociety.org for chapter email contacts.

FOR YOUR INFORMATION

Bylaws: The Gesneriad Society Bylaws are available online to all members or by writing to Allison Brigham, 1122 8th Street, Golden, CO 80401 USA.

Chapters: Report changes of chapter presidents to the Chapters and Affiliates Chair and the Editor.



Agalmyla clarkei (above) and *Agalmyla chorisepala* (below)

